

# YEONG HO HA

## PRESENT POSITION AND ADDRESS

---

Professor  
School of Electronics Engineering  
Kyungpook National University  
80 Daehak-ro, Buk-gu, Daegu 41566, Korea  
Phone: +82-53-950-5535  
FAX: +82-53-950-5505  
E-MAIL: [yha@ee.knu.ac.kr](mailto:yha@ee.knu.ac.kr)  
Homepage: <http://cilab.knu.ac.kr>

## DATE OF BIRTH

---

August 10, 1953

## EDUCATION

---

1979-1985	The University of Texas at Austin <i>M.S. in Electrical and Computer Engineering</i> <i>Ph. D in Electrical and Computer Engineering</i> <i>(Thesis: Combined Fan Beam/Parallel Beam Scanning in High Resolution Computed Tomography, Supervisor: John A. Pearce)</i>	Texas, U.S.A.
1976-1978	Kyungpook National University <i>M.S. in Electronic Engineering</i> <i>(Thesis: Analysis of Arterial Blood Pressure and its Electrical Analog Model, Supervisor: Wu-Il Lee)</i>	Daegu, Korea
1972-1976	Kyungpook National University <i>B.S. in Electronic Engineering</i>	Daegu, Korea

## PROFESSIONAL SERVICES

---

Mar. 2013 – present	Samsung Electronics, Digital Media & Communications R&D Center <i>Consulting Professor</i>
Jan. 2012 – present	Journal of Imaging Science and Technology <i>Associate Editor</i>
Oct. 2010 – present	The International Scholarly Research Network (ISRN) Signal Processing Journal <i>Editorial Board Member</i>
July 2008 – Dec. 2009	Korea Society for Imaging Science and Technology (KSIST) <i>Editor-in-Chief</i>

- Jan. 2006 – Dec. 2008 The Institute of Electronics Engineers of Korea (IEEK)  
*Vice President*  
*for Education and Regional Activities*
- Jan. 2004 – Dec. 2004 The Institute of Electronics Engineers of Korea (IEEK)  
*Vice President*  
*for Education and Regional Activities*
- Jan. 2003 – Dec. 2003 The Institute of Electronics Engineers of Korea (IEEK)  
*Vice President*  
*and Signal Processing Society President*
- July 2002 – present International Congress of Imaging Science (ICIS)  
*Korea representative*
- June 2001 – June 2006 Korea Society for Imaging Science and Technology (KSIST)  
*President*
- Jan. 1999 – May 2001 KSIST  
*Vice President*
- May 1998 – Dec. 2005 IEEE Daegu Section  
*Chairman*
- Jan. 1998 – Dec. 2003 IEEK  
*Trustee*
- Dec. 1997 – Feb. 2004 Korea-China Joint Committee for Basic Science Research  
(Korea Science and Engineering Foundation/National Natural Science  
Foundation of China)  
*Coordinator of Information Science*
- Nov. 1997 – Dec. 1999 Daegu Software Center  
*Steering Committee Chairman*
- Jan. 1997 – present IEEK  
*Councilor*
- Jan. 1995 – Dec. 1996 Society of Image Processing and Television, IEEK  
*Chairman*
- Jan. 1995 – Dec. 1996 IEEK  
*Cooperative Trustee*
- May 1992 – May 1993 IEEE Daegu Section  
*Founder and Chairman*
- Apr. 1987 – Mar. 2007 LG Electronics  
*R&D Consultant for Digital Signal and Image Processing,  
Digital Display, and Image Quality*
- Jan. 1987 – Dec. 1996 KICS and IEEK  
*Technical Committee*

## UNIVERSITY SERVICES AND EMPLOYMENT

---

- Feb. 2013 – present Digital Technology Research Center (DTRC), Kyungpook National University  
*Director*
- Jan. 2001 – Dec. 2006 Digital Technology Research Center (DTRC), Kyungpook National University  
*Director*
- Mar. 1997 – Aug. 1998 Kyungpook National University  
*Vice Dean for Planning and Coordination*
- July 1996 – Dec. 1999 Techno Innovation Center, Kyungpook National University  
*Director*
- July 1992 – Aug. 1993 Graduate School of Industry, Kyungpook National University  
*Director of School Affairs*
- Mar. 1991 – Mar. 1992 Dept. of Biomedical Engineering, Kyungpook National University  
*Chairman*
- Sep. 1987 – Sep. 1989 Performing Arts Center, Kyungpook National University  
*Head of Research and Production Division*
- Mar. 1986 – present Kyungpook National University  
*Assistant Professor, Associate Professor, and Professor*
- Jan. 1982 – Jul. 1985 Fine Arts Media Services Dept., The University of Texas at Austin  
*Technical Staff Assistant IV*

## PROFESSIONAL SOCIETY MEMBERSHIPS

---

- IEEE (The Institute of Electrical and Electronics Engineers)  
IS&T (Society for Imaging Science and Technology)  
SPIE (The International Society for Optical Engineering)  
Pattern Recognition Society  
IEEK (The Institute of Electronics Engineers of Korea)  
KICS (Korean Institute of Communication Sciences)  
KSIST (Korean Society for Imaging Science and Technology)

## PROFESSIONAL ACTIVITIES

---

- 2017 IEEE 7th International Conference on Consumer Electronics (ICCE-Berlin 2017), Berlin, Germany, September 3~6, 2017  
*: Technical Committee Member*
- Twenty-Fifth Color and Imaging Conference, Lillehammer, Norway, September 11~15, 2017  
*: Paper Reviewer*
- 20th IEEE International Symposium on Consumer Electronics (ISCE 2016), Sao Paulo, Brazil, September 28~30, 2016  
*: Technical Program Committee*
- 23rd International Conference on Pattern Recognition (ICPR), Cancun, Mexico, December 4~8, 2016  
*: Technical Program Committee*
- 2016 IEEE 5th International Conference on Consumer Electronics (2016 IEEE ICCE-Berlin), Berlin, Germany, September 4~7, 2016.  
*: Technical Program Committee*

2016 IEEE International Conference on Computer Vision and Image Processing (ICVIP 2016), Seoul, Korea, September 1~3, 2016.

: *Reviewer and Advisory Board*

2015 IEEE Fifth International Conference on Consumer Electronics (2015 IEEE ICCE – Berlin), Berlin, Germany, September 6 ~ 9, 2015.

: *Technical Program Committee*

2015 19th IEEE International Symposium on Consumer Electronics (ISCE 2015), Madrid, Spain, June 24 ~ 26, 2015.

: *Technical Program Committee*

2014 IEEE Fourth International Conference on Consumer Electronics (2014 IEEE ICCE – Berlin), Berlin, Germany, September 7 ~ 10, 2014.

: *Technical Program Committee*

IAPR, The 22th International Conference on Pattern Recognition (ICPR 2014), Stockholm, Sweden, August 24 ~ 28, 2014.

: *Paper Review Committee*

IAPR, The 4th Computational Color Imaging Workshop (CCIW 2013), Chiba, Japan, March 4~5, 2013.

: *Program Committee*

IS&T, The 6th European Conference on Colour in Graphics, Imaging, and Vision (CGIV 2012), Amsterdam, Netherland, May 6 ~ 9, 2012.

: *Paper Review Committee*

The 16th IEEE International Symposium on Consumer Electronics and 6th Annual Symposium on Signal Integrity (ISCE 2012), Harrisburg, PA, U.S.A., June 4 ~ 6, 2012.

: *Track Co-Chair*

IAPR, The 3rd Computational Color Imaging Workshop 2011(CCIW 2011), Milano, Italy, April 20 ~ 21, 2011.

: *Program Committee*

The 10th International Meeting on Information Display International Display Manufacturing Conference and Asia Display 2010 (IMID 2010): [Color / Human Factor / Display Measurement], Seoul, Korea, October 11 ~ 15, 2010.

: *Program Committee Chair*

IS&T, The 5th European Conference on Colour in Graphics, Imaging, and Vision Twelfth International Symposium on Multispectral Colour Science (CGIV 2010), Joensuu, Finland, June 14 ~ 17, 2010.

: *Paper Review Committee*

SPIE, Optomechatronic Technologies 2007(ISOT 2007), Beaulieu, Lausanne, Switzerland, Oct. 8 ~ 10, 2007.

: *Optomechatronic Computer-Vision Systems II Program Committee*

SPIE, Optics East: Photonics for Applications in Industry, Life Sciences, and Communications, Boston, U.S.A., Oct. 1 ~ 4, 2006.

: *Optomechatronic Computer-Vision Systems(PT111) Co-Chair*

SPIE, Optomechatronic Technologies 2005(ISOT 2005), Sapporo, Japan, Dec. 5 ~ 7, 2005.

: *Optomechatronic Machine Vision Conference Co-Chair*

SPIE, Photonics Asia 2004, Beijing, China, Nov. 8 ~ 12, 2004.

: *Program Committee*

SPIE, Optics East: Optical Science, Sensors and Systems, Technology, Architecture, Applications, Philadelphia, U.S.A., Oct. 25 ~ 28, 2004.

: *Program Committee*

IS&T, 2nd European Conference on Color in Graphics, Imaging, and Vision and Sixth International Symposium on Multispectral Color Science (CGIV 2004), Aachen, Germany, April 5 ~ 8, 2004.

: *Technical Program Committee*

The 5th Northeast Asia Symposium and The Second Asian eBusiness Workshop, Seoul, Korea, Aug. 22 ~ 24, 2002.

: *General Co-Chair*

SPIE, Photonics Asia 2002, Shanghai, China, Oct. 14 ~ 18, 2002.

: *Program Committee*

IS&T, International Congress of Imaging Science (ICIS 2002), Tokyo, Japan, May 13 ~ 17, 2002.

: *Track Program Committee*

The Korea-Japan Joint Symposium on Imaging Materials and Technology 2001, Kyungju, Korea, Nov. 1 ~ 3, 2001.

: *Honorary Chair*

IEEE International Conference on Multimedia and Expo (ICME 2001), Tokyo, Japan, Aug. 22 ~ 25, 2001.

: *Program Committee*

IEEE Region 10 International Conference on Electrical and Electronic Technology (TENCON 2001), Singapore, Aug. 19 ~ 22, 2001.

: *International Advisory Committee*

The 2001 International Technical Conference on Circuits/Systems, Computers, and Communications (ITC-CSCC 2001), Tokushima, Japan, July 10 ~ 12, 2001.

: *International Coordination Committee*

IEEE International Conference on Multimedia and Expo (ICME 2000), New York, U.S.A., July 30 ~ Aug. 2, 2000.

: *Program Committee*

The 2000 International Technical Conference on Circuits/Systems, Computers, and Communications (ITC-CSCC 2000), Pusan, Korea, July 11 ~ 13, 2000.

: *Organizing Committee Chair*

The 1999 International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC '99), Niigata, Japan, July 13 ~ 15, 1999.

: *Technical Program Committee Co-Chair*

SPIE, Photonics China 1998 - Electronic Imaging & Multimedia System II, Beijing, China, Sep. 16 ~ 19, 1998.

: *Program Committee*

Korea-Japan Joint Workshop on Frontiers of Computer Vision (FCV), Japan and Korea, Feb., 1996 ~ 2004.

: *Organizing Committee, Workshop Co-Chair,*

Third Joint Workshop on Multimedia Communications (JW-MMC'96), Daegu, Korea, Oct. 14 ~ 15, 1996.

: *Vice Chair*

First Joint Workshop on Multimedia Communications (JW-MMC'94), Taejon, Korea, Oct. 13 ~ 14, 1994.

: *Committee*

IEEE International Workshop on Intelligent Signal Processing and Communication System (ISPACS '94), Seoul, Korea, Oct. 5 ~ 7, 1994.

: *Technical Program Committee Co-Chair*

## RESEARCH INTERESTS

---

Digital Signal Processing

Image and Video Processing, Image Coding

Computer Vision

Color Signal and Image Processing

Multimedia

## COURSES TEACHING

---

Digital Signal Processing (undergraduate and graduate)

Digital Image Processing (undergraduate and graduate)

Computer Vision (graduate)

Biomedical Signal Analysis (graduate)

## AWARDS AND HONORS

---

Jul. 17, 2017 The Prize Award for Outstanding Paper from the 27th KOFST (Korea Federation of Science and Technology Societies).

Oct. 17, 2013 The 33rd Daegu City Culture Awards (Science and Engineering)

Jan. 1, 2012 SPIE Fellow from The International Society for Optics and Photonics

- Oct. 4, 2010 Excellent Paper Awards (Silver Prize) from the International Meeting on Information Display (IMID), sponsored by Korean Information Display Society (KIDS)
- Mar. 31, 2009 IS&T Fellow from Society for Imaging Science & Technology
- May 28, 2008 Excellent Academic and Research Achievement Award from Kyungpook National University
- Aug. 2, 2005 Designated as Laboratory of Excellence recipient from Korea Industrial Technology Foundation(KOTEF), sponsored by Ministry of Education & Human Resources Development, Ministry of Commerce, Industry and Energy, and Ministry of Labor
- Jan. 30, 2005 Appreciation for Notable Services and Contributions towards the Advancement of IEEE and the Engineering Professions from IEEE
- May 27, 2004 Digital color printing project was selected in 30 projects of the year for excellent performance and achievements from the Korea Science and Engineering Foundation (KOSEF)
- Jun. 25, 2002 Designated as National Research Laboratory (NRL) recipient from Korea Ministry of Science and Technology (MOST)
- Nov. 24, 2000 HaeDong Award for Excellent Academic and Research Achievements from IEEK
- Aug. 10, 2000 IEEE Third Millennium Medal Recipient
- Aug. 5, 2000 IEEE Senior Member
- Feb. 6, 1999 Bronze Prize for the Fifth Samsung Humantech Thesis Prize
- Nov. 3, 1998 Best Academic Advisor Award for Student Paper Contest from LG Telecom
- Mar. 28, 1997 Bronze Prize for the Third Samsung Humantech Thesis Prize
- Feb. 16, 1996 Best Paper Award from Kyungpook National University
- Jun. 30, 1993 Appreciation for Notable Services and Contributions towards the advancement of IEEE
- Nov. 18, 1989 Best Paper Award from IEEK

## PATENTS

---

- [1] Yeong Ho Ha, Jung-Min Sung, and Bong-Seok Choi, "Electronic Device and Method for Determining Metric of Achromatic Color, Recording Medium for Performing the Method," 10-1663463, Korea, 2016.
- [2] Yeong Ho Ha, Jung-Min Sung, and Bong-Seok Choi, "Electronic Device and Method for Determining Metric of Sharpness, Recording Medium for Performing the Method," 10-1659920, Korea, 2016.
- [3] Yeong Ho Ha, Kyeong Man Kim, Hyun Cheol Kim, Min Ki Cho, Hyun Soo Oh, Eun Ah Song, Dae Chul Kim, Wang Jun Kyung, "Image Compensation Device, Image Processing Apparatus and Methods Thereof," 9270867, U.S.A, 2016.

- [4] Yeong Ho Ha, Bong Seok Choi, and Jung Min Sung, "Method of Perceptual Color Quality Assessment on Display, Recording Medium and Device for Performing the Method," 10-0048050, Korea, 2015.
- [5] Yeong Ho Ha, Chul Hee Lee, Kyung Woo Ko, and Wang Jun Kyung, "Method for Improving Night Vision of Camera for Car," 10-1519162, Korea, 2015.
- [6] Yeong Ho Ha, Bong Seok Choi, and Jung Min Sung, "Method of Perceptual Quality Assessment on Display, Recording Medium and Device for Performing the Method," 10-1515387, Korea, 2015.
- [7] Yeong Ho Ha, Chul Hee Lee, Wang Jun Kyung, Dae Chul Kim, and Ho Gun Ha, "Apparatus and Method for Correcting Color," 10-1462440, Korea, 2014.
- [8] Yeong Ho Ha, Jae Kyung Kang, and Gi Hyeon Park, "Method and Apparatus for Driving Back Light of Liquid Crystal Display," 10-1388977, Korea, 2014.
- [9] Yeong Ho Ha, Kyung Woo Ko, Chul Hee Lee, and Wang Jun Kyung, "A System for Enhancing a Night Time Image for a Vehicle Camera," 10-1459782, Korea, 2014.
- [10] Yeong Ho Ha, Kyeong Man Kim, Hyun Chul Kim, In Ho Park, Jae Min Shin, Heui Keun Cho, Dae Chul Kim, and Wang Jun Kyung, "Colour Conversion Apparatus and Method Thereof," 8849025, U.S.A, 2014.
- [11] Yeong Ho Ha, Chul Hee Lee, Ho Gun Ha, Dae Chul Kim, and Wang Jun Kyung, "Apparatus and Method for Generating Images," 10-1418391, Korea, 2014.
- [12] Yeong Ho Ha, Woo Jun Chung, Kyeong Man Kim, Min Ki Cho, Hyun Soo Oh, Heui Keun Cho, and In Su Jang, "Print Controlling Terminal and Color Correction Method Generating Print Data Using Monitor Profile Changed based on Comparison of Printed Test Image to Expected Print Image Displayed on Monitor," 8441682, U.S.A, 2013.
- [13] Yeong Ho Ha, Chang Hwn Son, Kyeong Man Kim, Jung Ho Bang, and In Su Jang, "Image Forming Apparatus and Color Correcting Method Thereof, and Host Apparatus to Correct the Color of an Output Image Using the Same," 8605327, U.S.A, 2013.
- [14] Yeong Ho Ha, Cheol Hee Lee, Tae Hyoung Lee, Wang Jun Kyung, and In Su Jang, "Image pick-up Device and Auto Gain Control Method Thereof," 10-1056047, Korea, 2011.
- [15] Yeong Ho Ha, Kyu Pil Han, Kwang Choon Lee, Zoong Hee Kim, Jae Woo Ko, and Sung Hoon Choi, "Method and Apparatus for Automatically Compensating Sound Volume," PI9806443.6, Brazil, 2010.
- [16] Yeong Ho Ha, Kee Hyon Park, Kyung Woo Ko, Tae Hyoung Lee, Cheol Hee Lee, Dong Suk Lee, Jun Chae Lim, and Tae Heon Kim, "Method for Evaluating Image Quality of Camera for a Vehicle," 10-0916255, Korea, 2009.
- [17] Yeong Ho Ha and Kwang Chun Lee, "Color Picture Quality Compensation Circuit and Related Control Method thereof," PI9703277.8, Brazil, 2009.
- [18] Yeong Ho Ha, Chang Hwan Son, In Su Jang, Cheol Hee Lee, Jong Man Kim, Jae Won Moon, Sung Dae Cho, Young Min Jeong, and Yun Je Oh, "Method and Apparatus for Adjusting Image Color for Beamprojector," 10-0834638, Korea, 2008.
- [19] Yeong Ho Ha, Chang Hwan Son, Cheol Hee Lee, Jong Man Kim, Young Min Jeong, Sung Dae Cho, Seok Jin Won, and Chang Sub Shim "Method of Forming Image in a Portable Display Apparatus," 10-0827128, Korea, 2008.
- [20] Yeong Ho Ha, Chang Hwan Son, In Su Jang, Chul Hee Lee, Jong Man Kim, Jae Won Moon, Sung Dae Cho, Young Min Jeong, Yun Je Oh "Method and Apparatus for Adjusting Image Colors of Image Projector," 0088807, U. S. A., 2008.
- [21] Yeong Ho Ha, Chang Hwan Son, Cheol Hee Lee, Jong Man Kim, Young Min Jeong, Seok Jin Won, Sung Dae Cho, Sang Wook Oh, Kyoung Ju Park, Jung Hoon Park, and Jae Won Moon, "Embodiment Method for Color-Weakness in Mobile Display Apparatus," 10-0810268, Korea, 2008.
- [22] Yeong Ho Ha, Kee Hyon Park, Cheol Hee Lee, and Chae whan Lim, "Method for Matching Color of Display Unit between Devices Used Liquid Crystal Display and Cathod Ray Tube Display,"



- 10-0800736, Korea, 2008.
- [23] Yeong Ho Ha, Yang Ho Cho, Jae Cheon Lee, and Sang Um Choi, "Apparatus and Method for Compensating Color of Videosignal in a Display Device," 10-0710302, Korea, 2007.
  - [24] Yeong Ho Ha, Myong Young Lee, and Cheol Hee Lee, "LED Grouping and Arranging Method for Uniform White and Luminance Distribution of LED Backlight Unit," 10-0772567, Korea, 2007.
  - [25] Yeong Ho Ha, Oh Seol Kwon, In Su Jang, Jeong Ho Lee, and Jae Cheon Lee, "High-Fidelity Color Reproduction Method and Apparatus for Flat Panel Display Based on Color Appearance Model," 10-0771635, Korea, 2007.
  - [26] Yeong Ho Ha, Chang Hwan Son, Jong Man Kim, Cheol Hee Lee, Sung Dae Cho, Seok Jin Won, Jung Hoon Park, Young Min Jeong, Jae Won Moon, and Yun Je Oh, "Method for Compensating a Picture," 10-0735283, Korea, 2007.
  - [27] Yeong Ho Ha, Chang Hwan Son, and Yang Ho Cho, "Six Color Printer System and Method for Separating Six Color at the same," 10-0731582, Korea, 2007.
  - [28] Yeong Ho Ha and Kwang Chun Lee, "Color Picture Quality Compensation Circuit and Related Control Method thereof," 20992, Thailand, 2006.
  - [29] Yeong Ho Ha and Sun Kyu Kwon, "Method and Apparatus for Separating Color and Luminance Signals," 6995804, U.S.A., 2006.
  - [30] Yeong Ho Ha, Jong Keun Shin, and Ho Keun Lee, "Apparatus and Method for Encoding and Decoding Moving Picture Using Wavelet Transformation and Motion Estimation," 6985528, U.S.A., 2006.
  - [31] Yeong Ho Ha and Cheol Hee Lee, "Color Sample Formation Method of Printer," 10-0503517, Korea, 2005.
  - [32] Yeong Ho Ha and Tae Sik Kim, "Gamma Correction Circuit for Television Receiver," 19730536, Germany, 2005.
  - [33] Yeong Ho Ha, Kyu Pil Han, Kwang Choon Lee, Zoong Hee Kim, Jae Woo Ko, and Sung Hoon Choi, "Method and Apparatus for Automatically Compensating Sound Volume," 0884839, E.P.O, 2005.
  - [34] Yeong Ho Ha, Jong Keun Shin, and Ho Keun Lee, "Encoding and Decoding Device for Moving Picture Using Wavelet Transform and Motion Estimation," 10-0451584, Korea, 2004.
  - [35] Kwang Chun Lee, Yeong Ho Ha, and Kyong Chul Hong, "Color Picture Quality Compensation Circuit and Related Control Method thereof," ZL97104234.9, China, 2004.
  - [36] Yeong Ho Ha and Tae Sik Kim, "Gamma Correction Circuit for Television Receiver," 3579217, Japan, 2004.
  - [37] Kwang Chun Lee, Yeong Ho Ha, and Kyong Chul Hong, "Color Picture Quality Compensation Circuit and Related Control Method thereof," 3571493, Japan, 2004.
  - [38] Yeong Ho Ha, Kyu Pil Han, Kwang Choon Lee, Zoong Hee Kim, Jae Woo Ko, and Sung Hoon Choi, "Method and Apparatus for Automatically Compensating Sound Volume," ZL98102095.X, China, 2004.
  - [39] Kwang Chun Lee, Yeong Ho Ha, and Kyong Chul Hong, "Color Picture Quality Improvement, Specifically Skin Colour Correction," 812116, E.P.O, 2004.
  - [40] Yeong Ho Ha and Sang Han Yoon, "Image Compensation System for Video Appliances and Methods Thereof," MY116747-A, Malaysia, 2004.
  - [41] Yeong Ho Ha and Sang Han Yoon, "Image Compensation System for Video Appliances and Methods Thereof," MY116345-A, Malaysia, 2004.
  - [42] Yeong Ho Ha, Kyu Phil Han, Kwang Choon Lee, Joong Hee Kim, Jae Woo Ko, and Seong Hun Choi, "Method and Apparatus for Automatically Compensating Sound Volume," 6636609, U.S.A., 2003.
  - [43] Yeong Ho Ha, Kyu Phil Han, Kwang Choon Lee, and Sung Kyu Jeon, "Method and Apparatus for Automatically Compensating Tone Color," ZL98102090.9, China, 2003.
  - [44] Yeong Ho Ha, Hae Su Chung, and Ho Young Lee, "A Self Trouble Diagnosis Method for Digital

- Television and an Apparatus Thereof, and an After-Sales Service Management Method Using the Same Method and a System Thereof," 10-0384439, Korea, 2003.
- [45] Yeong Ho Ha and Sun Kyu Kwon, "C/Y Signal Separation Circuit and Separation Method," 10-0407952, Korea, 2003.
- [46] Byung Jun Moon, Jong Tae Lee, Chang Hun Kim, In Seok Seo, Jung Hun Lee, Cheol Hee Lee, and Yeong Ho Ha, "Method of Illuminant Spectral Power Distribution Estimation of a Digital Image," 10-0322189, Korea, 2002.
- [47] Yeong Ho Ha and Dong Hyeon Kim, "Method of Analyzing/Searching User's Viewing Habit Regarding Aerial Broadcasting," 6490724, U.S.A., 2002.
- [48] Yeong Ho Ha and Kyong Chul Hong, "Color Picture Quality Compensation Circuit and Related Control Method thereof," 2190936, Russia, 2002.
- [49] Jin Seop Kim, Kwang Choon Lee, and Yeong Ho Ha, "Symbol Color Compensating Method for Color Display System," 6384837, U.S.A., 2002.
- [50] Kyu Phil Han, Kwang Choon Lee, and Yeong Ho Ha, "Method and Apparatus for Automatically Compensating Tone Color," 2329808, U.K., 2002.
- [51] Yeong Ho Ha, "Image Index Method and Retrieval Method Using Color Information," 10-0356018, Korea, 2002,
- [52] Yeong Ho Ha and Kyung Cheol Hong, "Color Picture Quality Compensation Circuit and Related Control Method thereof," 204582, Mexico, 2001.
- [53] Yeong Ho Ha and Sang Han Yoon, "Image Compensation System for Video Appliances and Methods Thereof," ZL 95102836.7, China, 2001.
- [54] Yeong Ho Ha and Sang Han Yoon, "Image Processing System for Adjusting Image Characteristics of a Display System," 3200324, Japan, 2001.
- [55] Yeong Ho Ha, Kyu Pill Han, Kwang Choon Lee, Sung Kyu Jeon, "Method and Apparatus for Automatically Compensating Tone Color," 2765379, France, 2001.
- [56] Kwan Chun Lee, Yeong Ho Ha, and Kyong Chul Hong, "Color Picture Quality Compensation Circuit and Related Control Method thereof," 6169536, U.S.A., 2001.
- [57] Sang Han Yoon and Yeong Ho Ha, "Image Compensation System for Video Appliances and Methods Thereof," ID 0 006 682, Indonesia, 2001.
- [58] Gi Ryong Yun, Yeong Ho Ha, Eui Yoon Chung, Ho Young Lee, Sang Suck Lee, "Device and Method for Enhancement of NTSC Standard Image," 10-0296311, Korea, 2001.
- [59] Yeong Ho Ha, "Hierarchical Video Segmentation Based on Binary Split Method," 10-0276469, Korea, 2000.
- [60] Yeong Ho Ha, "Compression of 3D Object Based on Adaptive Bit Allocation and DFSVQ," 10-0276468, Korea, 2000.
- [61] Yeong Ho Ha, Kyu Pil Han, Kwang Choon Lee, Zoong Hee Kim, Jae Woo Ko, and Sung Hoon Choi, "Method and Apparatus for Automatically Compensating Sound Volume," 2330962, U.K., 2000.
- [62] Yeong Ho Ha and Sang Han Yoon, "Image Compensation System for Video Appliances and Methods Thereof," 700218, E.P.O, 2000.
- [63] Yeong Ho Ha, Kwang Choon Lee, and Jin Seop Kim, "Method for Favorite Color Compensation," 10-0266588, Korea, 2000.
- [64] Kyu Phil Han, Kwang Choon Lee, and Yeong Ho Ha, "Method and Apparatus for Automatically Compensating Tone Color," 10-0266578, Korea, 2000.
- [65] Eui Yoon Chung, Dong Hyun Kim, and Yeong Ho Ha, "Television Watching Habit Algorithm Based on Esthetics Engineering," 10-0253252, Korea, 2000.
- [66] Yeong Ho Ha and Tae Sik Kim, "Gamma Correction Circuit for Television Receiver," 6100938, U.S.A., 2000.
- [67] Yeong Ho Ha and Sang Han Yoon, "Image Compensation System for Video Appliances and Methods Thereof," 199380, Mexico, 2000.

- [68] Yeong Ho Ha, Kyu Pil Han, Kwang Choon Lee, Zoong Hee Kim, Jae Woo Ko, and Sung Hoon Choi, "Method and Apparatus for Automatically Compensating Sound Volume," 10-0273362, Korea, 2000.
- [69] Yeong Ho Ha, Kyu Pil Han, Kwang Choon Lee, and Sung Kyu Jeon, "Method and Apparatus for Automatically Compensating Tone Color," 5983191, U.S.A., 1999.
- [70] Yeong Ho Ha and Tae Sik Kim, "Gamma Correction Circuit for Television Receiver," 2315381, U.K., 1999.
- [71] Yeong Ho Ha and Tae Sik Kim, "Gamma Correction Circuit for Image Enhancement," 10-0206792, Korea, 1999.
- [72] Yeong Ho Ha and Kyung Cheol Hong, "Device and Method for Favorite Color Reappearance," 10-0237637, Korea, 1999.
- [73] Yeong Ho Ha, Chae Soo Lee, and Jong Hyun Yoon, "Nonlinear Quantization and Modified Dot Diffusion for Color Printing," 10-0235987, Korea, 1999.
- [74] Yeong Ho Ha, Chae Soo Lee, and Jong Hyun Yoon, "Color Matching Using Dot Gain and Intensity Compensation for Different Papers," 10-0209689, Korea, 1999.
- [75] Yeong Ho Ha and Sang Han Yoon, "Apparatus for Compensating for Image Display Characteristic," 5757438, U.S.A., 1998
- [76] Yeong Ho Ha, "Automatic Image Compensation Device and Method of Image Display Device," 10-0177937, Korea, 1998.
- [77] Yeong Ho Ha and Young Hyeon Jang, "Apparatus for Automatic Time Control of VCR/VTR," 10-0158861, Korea, 1998.
- [78] Yeong Ho Ha, Chae Soo Lee, and Jong Hyun Yoon, "Color Printer Resolution Enhancement Using Nonlinear Quantization and Modified Dot Diffusion Based on Human Visual Characteristics," 10-0172917, Korea, 1998.
- [79] Yeong Ho Ha, "TV/VTR Time Automatic Control and storage Apparatus," 10-0165877, Korea, 1998.
- [80] Yeong Ho Ha and Sang Han Yoon, "Image Processing System for Adjusting Image Characteristics of a Display System," 5642172, U.S.A., 1997.

## LIST OF PUBLICATIONS

---

### **International Journals**

- [1] Jung Min Sung, Bong Yeol Choi, and Yeong Ho Ha, " Unsupervised Color and Contrast Enhancement based on the Intensity Difference between Adjacent Pixels," Journal of Imaging Science and Technology, vol. 61, no. 5, 050502-1 – 050504-13, Jul. 2017.
- [2] Shibudas Kattakkalil Subhashdas, Doo Hyun Choi, Ho Gun Ha, and Yeong Ho Ha, "Hierarchical Classification Model for Color Constancy," Journal of Imaging Science and Technology, vol. 61, no. 4, 040502-1 – 040502-13, Jul. 2017.
- [3] Ho Gun Ha, Shibudas Kattakkalil Subhashdas, and Yeong Ho Ha, "Gamut Estimation with Efficient Sampling Based on Modified Segment Maxima," Displays, vol. 48, pp. 9-20, Jul. 2017.
- [4] Ji Hoon Yoo, Wang Jun Kyung, Jae Seung Choi, and Yeong Ho Ha, " Color Image Enhancement Using Weighted Multi-scale Compensation Based on Gray World Assumption," Journal of Imaging Science and Technology, vol. 61, no. 3, 030507-1 – 030507-13, May. 2017
- [5] Dae Chul Kim, Ji Hoon Yoo, Won Hee Choe, and Yeong Ho Ha, "Visibility Enhancement of Mobile Device Through Luminance and Chrominance Compensation upon Hue," IEEE Transactions on Industrial Electronics, vol. 64, no. 4, pp. 3039-3047, Apr. 2017.
- [6] Ho Gun Ha, Xi Yuan, Massimo Fierro, and Yeong Ho Ha, "Ghost Removal in Exposure Fusion by Temporal Consistency Assessment," Journal of Imaging Science and Technology, vol. 60, no. 4,

040501-1 – 040501-12, Jul. 2016.

- [7] Jung Min Sung, Bong Seok Choi, and Yeong Ho Ha, "Comparative Display Image Quality Evaluation Based on Analytic Network Process for Mobile Devices," *Journal of Imaging Science and Technology*, vol. 60, no. 2, 20501-1 – 20501-7, Mar. 2016.
- [8] Ji Hoon Yoo, Dae Chul Kim, Ho Gun Ha, and Yeong Ho Ha, "Adaptive Spectral Reflectance Reconstruction Method Based on Wiener Estimation Using Similar Training Set," *Journal of Imaging Science and Technology*, vol. 60, no. 2, pp. 20503-1 – 20503-8, Mar. 2016
- [9] Dae Chul Kim, Wang Jun Kyung, Ho Gun Ha, and Yeong Ho Ha, "Moire Reduction Using Inflection Point and Color Variation in Digital Camera of no Optical Low Pass Filter," *IEICE Transactions on Information and Systems*, vol. E98-D, no. 12, 2290 – 2298, Dec. 2015.
- [10] Jung Min Sung, Chang Ha Lee, Yeong Ho Ha, and Bong Yeol Choi, "Morphological Image Reconstruction Using Directional Propagation," *Journal of Imaging Science and Technology*, vol.59, no. 5, 050503-1 – 050503-7, Sep./Oct., 2015.
- [11] Ho Gun Ha, Shibudas Kattakkalil, Bong Seok Choi, and Yeong Ho Ha, "Hierarchical Integrated Color Matching in a Stereoscopic Image Based on Image Decomposition," *Journal of Imaging Science and Technology*, vol. 59, no. 3, pp. 30402-1-30402-7, May, 2015.
- [12] Dae Chul Kim, Dong Wook Kang, Kyung Mo Kim, and Yeong Ho Ha, "Visibility Enhancement of Mobile Device by Adaptive Brightness Adjustment According to App Image Features," *Journal of Imaging Science and Technology*, vol. 59, no. 2, pp. 20502-1 – 20502-9, Mar., 2015.
- [13] Dae Chul Kim, Wang Jun Kyung, and Yeong Ho Ha, "Preferred Racial Skin Color Reproduction in an Image Based Race Classification," *Journal of Imaging Science and Technology*, vol. 59, no. 2, pp. 20504-1 – 20504-9, Mar., 2015.
- [14] Ho Gun Ha, Dae Chul Kim, Wang Jun Kyung, and Yeang Ho Ha, "Color Improvement Based on Local Color Transfer in Digital Intermediate of Digital Cinema," *IEICE Transactions on Information and Systems*, vol. E98-D, no. 1, pp. 173–179, Jan. 2015.
- [15] Bong Seok Choi, Dae Chul Kim, and Yeang Ho Ha, "Multi-Spectral Flash Imaging Under
- [16] Low-Light Condition Using Optimization Method," *Journal of Imaging Science and Technology*, vol. 58, no. 5, pp. 050501-1–050501-7, Sep./Oct. 2014.
- [17] Ho Gun Ha, Il Su Park, Wang Jun Kyung, Dae Chul Kim, and Yeang Ho Ha, "Correction of the Hue Shift Phenomenon due to an Additional White Channel in a DLP Projector," *Journal of Imaging Science and Technology*, vol. 57, no. 6, pp. 060506-1–060506-10, Nov./Dec. 2013.
- [18] Wang Jun Kyung, Dae Chul Kim, Oh Seol Kwon and Yeang Ho Ha, "Correction of Faded Colors in an Image Using Integrated Multiscale Gray World Algorithm," *JournJournal of Imaging Science and Technology*, vol. 57, no. 6, pp. 060505-1–060505-14, Nov./Dec. 2013.
- [19] Massimo Fierro, Ho Gun Ha, and Yeong Ho Ha, "Noise Reduction based on Partial-Reference, Dual-Tree Complex Wavelet Transform Shrinkage," *IEEE Transactions on Image Processing*, vol. 22, no. 5, pp. 1859 – 1872, May 2013.
- [20] In Su Jang, Tae Hyoung Lee, Wang Jun Kyung, and Yeang Ho Ha, "Local Contrast Enhancement Based on Adaptive Multiscale Retinex using Intensity Distribution of Input Image," *Journal of Imaging Science and Technology*, vol. 55, no. 4, pp. 040502-1 – 040502-14, Jul./Aug. 2011.
- [21] Kyung Woo Ko, Dae Chul Kim, Wang Jun Kyung, and Yeong Ho Ha, "Color Embedding and Recovery using Wavelet Packet Transform with Pseudo-randomized Saturation Code," *Journal of Imaging Science and Technology*, vol. 55, no. 3, pp. 030501-1 – 030501-10, May/June. 2011.
- [22] Ho Gun Ha, In Su Jang, and Yeong Ho Ha, "Subpixel Shift Estimation in Noisy Image using a Wiener Filtered Local Region," *IEEE Transactions on Consumer Electronics*, vol. 57, no. 2, pp. 623 – 630, May 2011.
- [23] Dae Chul Kim, Tae Hyoung Lee, Ho Gun Ha, and Yeong Ho Ha, "Color Correction Using a Still Camera for Images Projected onto a Light Colored Screen," *Journal of Imaging Science and Technology*, vol. 55, no. 2, pp. 020507-1 – 020507-13, Mar./Apr. 2011.
- [24] In Su Jang, Wang Jun Kyung, Kyeong Man Kim, and Yeong Ho Ha, "User-Configured

- Monitor-to-Printer Color Reproduction," *Journal of Imaging Science and Technology*, vol. 55, no. 2, pp. 020506-1 – 020506-10, Mar./Apr. 2011.
- [25] Chang Hwan Son, Hyung Min Park, and Yeong Ho Ha, "Improved Color Separation Based on Dot-Visibility Modeling and Color Mixing Rule for Six-Color Printers," *Journal of Imaging Science and Technology*, vol. 55, no. 1, pp. 010505-1 - 010505-16, Jan./Feb. 2011.
- [26] Wang Jun Kyung, Tae Hyoung Lee, Cheol Hee Lee, and Yeong Ho Ha, "Hue Preservation using Enhanced Integrated Multi-scale Retinex for Improving Color Correction," *Journal of Imaging Science and Technology*, vol. 55, no. 1, pp. 010504-1 - 010504-10, Jan./Feb. 2011.
- [27] Oh Seol Kwon and Yeong Ho Ha, "Panoramic Video using Scale-Invariant Feature Transform with Embedded Color-Invariant Values," *IEEE Transactions on Consumer Electronics*, vol. 56, no. 2, pp. 792 – 798, May 2010.
- [28] Chang Hwan Son, In Su Jang, Tae Hyoung Lee, and Yeong Ho Ha, "Photo-Inkjet Printing Method Based on Limited Colorant Amount and Dot-Visibility Ordering," *IEEE Transactions on Consumer Electronics*, vol. 56, no. 2, pp. 280 – 288, May 2010.
- [29] Tae Yong Park, In Su Jang, and Yeong Ho Ha, "Banding Artifact Reduction with Interweaving Dot-dispersion Based on Probability Model and Human Visual System Weighted Root Mean Squared Error in Blue-noise Multilevel Dithering," *Journal of Imaging Science and Technology*, vol.53, no. 6, pp. 060504-1 – 060504-13, Nov./Dec. 2009.
- [30] Kyung Woo Ko, Tae Yong Park, and Yeong Ho Ha, "Analysis of Relationship between Image Compression and Gamut Variation: JPEG and JPEG2000," *Journal of Imaging Science and Technology*, vol. 53, no. 6, 060402-1 – 060402-12, Nov./Dec. 2009.
- [31] In Su Jang, Kee Hyon Park, and Yeong Ho Ha, "Color Correction via Estimating Dominant Chromaticity in Multi-scaled Retinex," *Journal of Imaging Science and Technology*, vol. 53, no. 5, pp. 050502-1 – 050502-11, Sep./Oct. 2009.
- [32] Oh Seol Kwon, Tae Yong Park, and Yeong Ho Ha, "High Fidelity Color Reproduction of Plasma Displays under Ambient Lighting," *IEEE Transactions on Consumer Electronics*, vol. 55, no. 3, pp. 1015 – 1020, Aug. 2009.
- [33] Kee Hyon Park, Oh Seol Kwon, and Yeong Ho Ha, "Time-Stable Red, Green, and Blue Light-Emitting Diode Backlighting Control Using Time-Varying Transform Matrix," *Journal of Imaging Science and Technology*, vol. 53, no. 3, pp. 030503-1 – 030503-5, May/June. 2009.
- [34] Kee Hyon Park, Dae Keun Park, and Yeong Ho Ha, "High Dynamic Range Image Acquisition from Multiple Low Dynamic Range Images Based on Estimation of Scene Dynamic Range," *Journal of Imaging Science and Technology*, vol. 53, no. 2, pp. 020505-1 – 020505-12, Mar./Apr. 2009.
- [35] Chang Hwan Son and Yeong Ho Ha, "Color Correction of Images Projected on Colored Screen for Mobile Beam Projector," *Journal of Imaging Science and Technology*, vol. 52, no. 3, pp. 030505-1 – 030505-11, May/June. 2008.
- [36] Tae Hyoung Lee, Oh Seol Kwon, Tae Yong Park, Myong Young Lee, and Yeong Ho Ha, "Hue-Shift Modeling and Correction Method for High-Luminance Display," *Journal of Imaging Science and Technology*, vol. 52, no. 2, pp. 020602-1 – 020602-10, Mar./Apr. 2008.
- [37] Kyung Woo Ko, Oh Seol Kwon, Chang Hwan Son, and Yeong Ho Ha, "Color Embedding and Recovery Based on Wavelet Packet Transform," *Journal of Imaging Science and Technology*, vol. 52, no. 1, pp. 010501-1 – 010501-10, Jan./Feb. 2008.
- [38] Tae Yong Park, Kee Hyon Park, In Su Jang, Oh Seol Kwon, and Yeong Ho Ha, "Banding-Artifact Reduction Using an Improved Threshold Scaling Function in Multitoning with Stochastic Screen," *Journal of Imaging Science and Technology*, vol. 51, no. 6, pp. 502-508, Nov./Dec. 2007.
- [39] Chang Hwan Son, Myong Young Lee, Cheol Hee Lee, and Yeong Ho Ha, "Physical-based Photon Mapping for LED Backlight Lighting Simulator," *Journal of the Society for Information Display*, vol. 15, no. 9, pp. 699-707, Sep. 2007.
- [40] Chang Hwan Son, Cheol Hee Lee, Kil Houm Park, and Yeong Ho Ha, "Real-time Color Matching between Camera and LCD based on 16-bit LUT Design in Mobile Phone," *Journal of Imaging*

*Science and Technology*, vol. 51, no. 4, pp. 348-359, Jul./Aug. 2007.

- [41] In Su Jang, Chang Hwan Son, Tae Yong Park, and Yeong Ho Ha, "Improved Inverse Characterization of Multi-Colorant Printer Using Colorant Correlation," *Journal of Imaging Science and Technology*, vol. 51, no. 2, pp. 175-184, Mar./Apr. 2007.
- [42] Oh Seol Kwon, Cheol Hee Lee, Kee Hyon Park, and Yeong Ho Ha, "Surface Reflectance Estimation Using the Principal Components of Similar Colors," *Journal of Imaging Science and Technology*, vol. 51, no. 2, pp. 166-174, Mar./Apr. 2007.
- [43] Myong Young Lee, Jong Man Kim, Chang Hwan Son, Cheol Hee Lee, and Yeong Ho Ha, "Illumination Level Adaptive Color Reproduction Method with Lightness Adaptation and Flare Compensation for Mobile Display," *Journal of Imaging Science and Technology*, vol. 51, no. 1, pp. 44-52. Jan./Feb. 2007.
- [44] Jae Hyun Kwon, Chang Hwan Son, Yang Ho Cho, and Yeong Ho Ha, "Text-Enhanced Error Diffusion Using Multiplicative Parameters and Error Scaling Factor," *Journal of Imaging Science and Technology*, vol. 50, no. 5, pp. 437-447. Sep./Oct. 2006.
- [45] Kwang Min Jeong, Joon Jae Lee, and Yeong Ho Ha, "Video Sequence Matching Using Singular Value Decomposition," *Lecture Notes in Computer Science*, 4141, pp. 426-435, 2006.
- [46] Dong Woo Kang, Yang Ho Cho, Yun Tae Kim, Won Hee Choe, and Yeong Ho Ha, "Multiprimary Decomposition Method Based on a Three-Dimensional Look-Up Table in Linearized LAB Space for Reproduction of Smooth Tonal Change," *Journal of Imaging Science and Technology*, vol. 50, no. 4, pp. 357-367, Jul./Aug. 2006.
- [47] Kee Hyon Park, Myong Young Lee, Cheol Hee Lee, and Yeong Ho Ha, "Characterization of Error Reduction in Mobile Liquid Crystal Display Using Distinct XYZ Electro-Optical Transfer Functions for Each Channel and Interchannel Components," *Journal of Imaging Science and Technology*, vol. 50, no. 4, pp. 349-356, Jul./Aug. 2006.
- [48] Jea Seung Choi, Jin Kyu Lim, Jae Yeal Nam, and Yeong Ho Ha, "Image Capture and Storage System for Digital TV without Degrading Image Quality," *IEEE Transactions on Consumer Electronics*, vol. 52, no. 2, pp. 467-471, May 2006.
- [49] Yang Ho Cho, Hye Bong Im, and Yeong Ho Ha, "Inverse Characterization Method of Alternate Gain-Offset-Gamma Model for Accurate Color Reproduction in Display Device," *Journal of Imaging Science and Technology*, vol. 50, no. 2, pp. 139-148, Mar./Apr. 2006.
- [50] Chang Hwan Son, Yang Ho Cho, Cheol Hee Lee, and Yeong Ho Ha, "Six Color Separation Using Additional Colorants and Quantitative Granularity Metric" *Journal of Imaging Science and Technology*, vol. 50, no. 1, pp. 25-34, Jan./Feb. 2006.
- [51] Tae Yong Park, Myong Young Lee, Jong Man Kim, and Yeong Ho Ha, "Design and Implementation of Digital Photo Kiosk System with Auto Color-Correction Module," *IEEE Transactions on Consumer Electronics*, vol. 51, no. 4, pp. 1067-1073, Nov. 2005.
- [52] Jea Seung Choi, Jae Yeal Nam, and Yeong Ho Ha, "Image Display Processing System for High Definition Television," *IEEE Transactions on Consumer Electronics*, vol. 51, no. 4, pp. 1335-1340, Nov. 2005.
- [53] Oh Seol Kwon, Yang Ho Cho, Yun Tae Kim, and Yeong Ho Ha, "Illumination Estimation Based on Valid Pixel Selection from CCD Camera Response," *Journal of Imaging Science and Technology*, vol. 49, no. 3, pp. 308-316, May/June. 2005.
- [54] Myong Young Lee, Joon Ho Shin, Jung Hyong Park, Cheol Hee Lee, and Yeong Ho Ha, "A Lamp-Lit Image Rendering of Automotive Rear Lamp Using Spectral-Based Ray Tracing Method," *SAE Transactions - Journal of Passenger Cars - Mechanical Systems*, pp. 2458-2467, Mar. 2005.
- [55] Tae Yong Park, Yang Ho Cho, Yun Tae Kim, and Yeong Ho Ha, "Multi-level Vector Error Diffusion for Smear Artifacts Reduction in Boundary Regions," *Journal of Imaging Science and Technology*, vol. 48, no. 6, pp. 562-572, Nov./Dec. 2004.
- [56] Jea Seung Choi, Joo Won Kim, Dong Seog Han, Jae Yeal Nam, and Yeong Ho Ha, "Design and Implementation of DVB-T Receiver System for Digital TV," *IEEE Transactions on Consumer*

- Electronics*, vol. 50, no. 4, pp. 991-998, Nov. 2004.
- [57] Ick Hwan Kim, Jae Seung Choi, Yun Jung Lee, Jae Yeal Nam, and Yeong Ho Ha, "Design and Implementation of Multimedia Functional Module for Digital TV," *IEEE Transactions on Consumer Electronics*, vol. 50, no. 3, pp. 962-967, Aug. 2004.
- [58] Cheol Hee Lee, Kuk Sagong, and Yeong Ho Ha, "A Method for Generating Simulated Nighttime Road Images Under Automotive Headlamp Lights," *IEEE Trans. on Vehicular Technology*, vol. 53, no. 3, pp. 1-10, May 2004.
- [59] Yun Tae Kim, Yang Ho Cho, Cheol Hee Lee, and Yeong Ho Ha, "Halftoning Method Using Dispersed CMY Dithering and Blue Noise Mask," *Journal of Imaging Science and Technology*, vol. 48, no. 1, pp. 37-44, Jan./Feb. 2004.
- [60] Yang Ho Cho, Yun Tae Kim, Cheol Hee Lee, and Yeong Ho Ha, "Gamut Mapping Based on Color Space Division for Enhancement of Lightness Contrast and Chrominance," *Journal of Imaging Science and Technology*, vol. 48, no. 1, pp. 66-74, Jan./Feb. 2004.
- [61] Yun Tae Kim, Cheol Hee Lee, Jeong Yeop Kim, and Yeong Ho Ha, "Estimation of Chromatic Characteristics of Scene Illumination in an Image by Surface Recovery from the Highlight Region," *Journal of Imaging Science and Technology*, vol. 48, no. 1, pp. 28-36, Jan./Feb. 2004.
- [62] Ho Young Lee, Ho Keun Lee, and Yeong Ho Ha, "Spatial Color Descriptor for Image Retrieval and Video Segmentation," *IEEE Trans. on Multimedia*, vol. 5, no. 3, pp. 358-367, Sep. 2003.
- [63] Oh Ju Kwon and Yeong Ho Ha, "Multi-Carrier PAP Reduction Method Using Sub-optimal PTS with Threshold," *IEEE Transactions on Broadcasting*, vol. 49, no. 2, pp. 232-236, Jun. 2003.
- [64] Sung Ryoul Cheon, Ik Hwan Kim, Ho Keun Lee, and Yeong Ho Ha, "Digital Ready TV Platform with Synchronization Shaping Circuit," *IEEE Trans. on Consumer Electronics*, vol. 49, no. 1, pp. 220-228, Feb. 2003.
- [65] Young Sik Park, Gi Seok Kim, Eui Yoon Chung, and Yeong Ho Ha, "Hierarchical Spatio-temporal Moving Objects Segmentation," *Optical Engineering*, vol. 42, no. 1, pp. 245-254, Jan. 2003.
- [66] Yong Sung Kwon, Yun Tae Kim, Cheol Hee Lee, and Yeong Ho Ha, "Modified Jointly Blue Noise Mask Approach Using S-CIELAB Color Difference," *Journal of Imaging Science and Technology*, vol. 46, no. 6, pp. 543-549, Nov./Dec. 2002.
- [67] Sang Um Choi, Sun Kyu Kwon, Hyun Woo Kim, Yong Sung Kwon and Yeong Ho Ha, "Motion Adaptive 3D Y/C Separation Algorithm Using Motion Estimation and Motion Compensation," *IEEE Transactions on Consumer Electronics*, vol. 47, no. 4, pp. 770-778, Nov. 2001.
- [68] Cheol Hee Lee, Suk Chul Ahn, and Yeong Ho Ha, "Color Space Conversion via Gamut-based Color Samples of Printer," *Journal of Imaging Science and Technology*, vol. 45, no. 5, pp. 427-435, Sep./Oct. 2001.
- [69] Kyu Phil Han, Kun Woen Song, Eui Yoon Chung, Seok Je Cho, and Yeong Ho Ha, "Stereo Matching Using Genetic Algorithm with Adaptive Chromosomes," *Pattern Recognition*, vol. 34, no. 9, pp. 1729-1740, Sep. 2001.
- [70] Jeong Yeop Kim, Yang Seok Seo, and Yeong Ho Ha, "Estimation of Illuminant Chromaticity from Single Color Image Using Perceived Illumination and Highlight," *Journal of Imaging Science and Technology*, vol. 45, no. 3, pp. 274-282, May/June. 2001.
- [71] Chae Soo Lee, Yang Woo Park, Seok Je Cho, and Yeong Ho Ha, "Gamut Mapping Algorithm Using Lightness Mapping and Multiple Anchor Points for Linear Tone and Maximum Chroma Reproduction," *Journal of Imaging Science and Technology*, vol. 45, no. 3, pp. 209-223, May/June. 2001.
- [72] Kyeong Man Kim, Jeong Yeop Kim, Hee Soo Kim, and Yeong Ho Ha, "Natural Color Reproduction of an Image with Highlights by Vector Transformation and Nonlinear Mapping," *Journal of Imaging Science and Technology*, vol. 45, no. 2, pp. 100-106, Mar./Apr. 2001.
- [73] Cheol Hee Lee, Hyun Ju Song, Guk Sagong, and Yeong Ho Ha, "Calculation of Nighttime Road Image under Automotive Headlamp Lights," *SAE Transactions - Journal of Passenger Cars - Mechanical Systems*, vol. 110, no. 6, pp. 17-21, Mar. 2001.

- [74] Ho Young Lee, Jin Woo Park, Tae Min Bae, Sang Um Choi, and Yeong Ho Ha, "Adaptive Scan Rate Up-Conversion System Based on Human Visual Characteristics," *IEEE Trans. on Consumer Electronics*, vol. 46, no. 4, pp. 999-1006, Nov. 2000.
- [75] Jae Yeal Nam, Jae Su Seo, Jin Sook Kwak, Myung Ho Lee, and Yeong Ho ha, "New Fast-Search Algorithm for Block Matching Motion Estimation Using Temporal and Spatial Correlation of Motion Vector," *IEEE Trans. on Consumer Electronics*, vol. 46, no. 4, pp. 934-942, Nov. 2000.
- [76] Cheol Hee Lee, Byung Joon Moon, Jeong Hoon Lee, Eui Yoon Chung, and Yeong Ho Ha, "Estimation of Spectral Distribution of Scene Illumination from a Single Image," *Journal of Imaging Science and Technology*, vol. 44, no.4, pp. 308-314, Aug. 2000.
- [77] Kun Woen Song, Kyeong Man Kim, Kyu phil Han, Jae Yeal Nam, and Yeong Ho Ha, "New Video Segmentation Algorithm Using a Combined Segmentation Measure for Content-based Coding," *Optical Engineering*, vol. 39, no.8, pp. 2036-2045, Aug. 2000.
- [78] Kyu Phil Han, Tae Min Bae, and Yeong Ho Ha, "Hybrid Stereo Matching with a New Relaxation Scheme of Preserving Disparity Discontinuity," *Pattern Recognition*, vol. 33, no. 5, May 2000.
- [79] Chae Soo Lee, Cheol Hee Lee, and Yeong Ho Ha, "Parametric Gamut Mapping Algorithms Using Variable Anchor Points," *Journal of Imaging Science and Technology*, vol. 44, no. 1, Jan. 2000.
- [80] Cheol Hee Lee, Chae Soo Lee, and Yeong Ho Ha, "Color Consistency Between Different Printing Materials Using Dot Gain and Intensity Compensation," *IEEE Trans. on Consumer Electronics*, vol. 45, no. 4, pp.1016-1024, Nov. 1999.
- [81] Jin Woo Park, Kun Woen Song, Ho Young Lee, Jae Yeal Nam, and Yeong Ho Ha, "Topological Surgery Improvements Based on Adaptive Bit Allocation and DFSVQ," *IEEE Trans. on Circuits and Systems for Video Technology*, vol. 9, no. 2, pp.370-377, Mar. 1999.
- [82] Kyeong Hoon Do, Yong Suk Kim, Tae Uk Uam, and Yeong Ho Ha, "Iterative Relaxational Stereo Matching Based on Adaptive Support Between Disparities," *Pattern Recognition*, vol. 31, no. 8, pp.1049-1059, Aug. 1998.
- [83] Kyu Phil Han, Young Sik Park, Seong Gyu Jeon, Gwang Choon Lee, and Yeong Ho Ha, "Genre Classification System of TV Sound Signals Based on a Spectrogram Analysis," *IEEE Trans. on Consumer Electronics*, vol. 44, no. 1, pp.33-42, Feb. 1998.
- [84] Eung Joo Lee and Yeong Ho Ha, "Favorite Color Correction for Reference Color," *IEEE Trans. on Consumer Electronics*, vol. 44, no. 1, pp.10-15, Feb. 1998.
- [85] Eung Joo Lee and Yeong Ho Ha, "Automatic Flesh Tone Reappearance for Color Enhancement in TV," *IEEE Trans. on Consumer Electronics*, vol.43, no.4, pp. 1153-1159, Dec. 1997.
- [86] Kyu Phil Han, Kun Woen Song, Zoong Hee Kim, Gwang Choon Lee, and Yeong Ho Ha, "Automatic Volume Control System for Compensation of Volume Difference Between TV Channels," *IEEE Trans. on Consumer Electronics*, vol.43, no.4, pp. 1197-1205, Dec. 1997.
- [87] Yong Suk Kim, Jun Jae Lee, and Yeong Ho Ha, "Stereo Matching Algorithm Based on Modified Wavelet Decomposition Process," *Pattern Recognition*, vol.30, no.6, pp. 929-952, Jun. 1997.
- [88] Kyeong Man Kim, Chae Soo Lee, Eung Joo Lee, and Yeong Ho Ha, "Color Image Quantization and Dithering Method Based on HVS Characteristics," *Journal of ImagingScience and Technology*, vol.40, No. 6, pp. 502-509, Nov. 1996.
- [89] Han Kyu Lee, Jae Yeal Nam, Jin Soo Choi, and Yeong Ho Ha, "Flexible VLSI Architecture for Block-Matching Motion Estimation," *IEICE Trans. Inf. & Syst.*, vol. E79-D, no.6, pp. 752-758, Jun. 1996.
- [90] Eung Joo Lee, In Gab Jeong, Yang Woo Park, Kwang Chun Lee, and Yeong Ho Ha, "Color Enhancement of TV Picture Using RGB Sensor," *IEEE Trans. on Consumer Electronics*, vol.42, no.2, pp. 182-191, May 1996.
- [91] Hae Kwan Jeong, Chun Pyo Hong, Jin Soo Choi, and Yeong Ho Ha, "A VLSI Architecture for the Alternative Subsampling-based Block Matching Algorithm," *IEEE Trans.on Consumer Electronics*, vol. 41, no.2, pp. 239-247, Mar.1995.
- [92] Jun Jae Lee, Jae Chang Shim, and Yeong Ho Ha, "Stereo Correspondence Using Hopfield Neural



- Network of a New Energy Function," *Pattern Recognition*, vol. 27, no. 11, pp. 1513-1522, Nov. 1994.
- [93] Yeong Ho Ha and John A. Pearce, "A New Window and Comparison to Standard Windows," *IEEE Trans. on Acoustic, Speech, and Signal Processing*, vol. 37, no. 2, pp. 298-301, Feb. 1989.

### **Domestic Journals(in Korean)**

- [1] Shibudas Kattakkalil Subhashdas, Ji Hoon Yoo, and Yeong-Ho Ha, "Illuminant Chromaticity Estimation via Optimization of RGB Channel Standard Deviation," *The Journal of The Institute of Electronics and Information Engineers*, vol. 53, no. 6, pp. 929 - 940, June, 2016.
- [2] Seung Yun Lee, Ho Gun Ha, Kun Woen Song, and Yeong-Ho Ha, "Gamma Correction for Local Brightness and Detail Enhancement of HDR Images," *The Journal of Korea Multimedia Society*, vol. 19, no. 5, pp. 837 - 847, May, 2016
- [3] Ji Heon Lee, Dae Chul Kim, and Yeong Ho Ha, "Illumination Estimation Based on Nonnegative Matrix Factorization with Dominant Chromaticity Analysis," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 52, no. 8, pp. 89–96, Aug. 2015.
- [4] Jung Won Shin, Bong Seok Choi, and Yeong Ho Ha, "Improved Linearity and Saturation of Current Sensor by Laminating Silicon Steel and Ferromalloy," *The Journal of Sensor Science and Technology*, vol 24, no. 3, pp. 194-201, May 2015.
- [5] Eui Won Nam, Wang Jun Kyung, Ho Gun Ha, and Yeong Ho Ha, "Perceptual Contrast Based on Distribution of Brightness in CIECAM02 for Mobile Display, " *The Journal of The Institute of Electronics Engineers of Korea*, vol. 52, no. 2, pp. 135–141, Feb. 2015.
- [6] Yuan Xi, Ho Gun Ha, Cheol Hee Lee, and Yeong Ho Ha, "Ghost-free High Dynamic Range Imaging Based on Brightness Bitmap and Hue-angle Constancy," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 52, no. 1, pp. 111–120, Jan. 2015.
- [7] Bong Seok Choi, Cheol Hee Lee, Myong Hui Choi, and Yeong Ho Ha, "Perceived Image Quality Metric of Mobile Display by Using Displayed Image Analysis," *The Journal of The Korean Society for Imaging Science and Technology*, vol. 20, no. 4, pp. 7–15, Dec. 2014.
- [8] Wang Jun Kyung and Yeong Ho Ha, "Enhancement of Faded Images Using Integrated Compensation Coefficients based on Multi-scale Gray world Algorithm," *The Journal of The Korean Institute of Communication Sciences*, vol. 39A, no.8, pp. 459–466, Aug. 2014.
- [9] Dae Chul Kim, Dong Wook Kang, Kyung Mo Kim and Yeong Ho Ha, "Enhancement of Visibility Using App Image Categorization in Mobile Device," *The Journal of The institute of Electronics Engineers of Korea*, will be published vol. 51, no. 8, Aug. 2014.
- [10] Jung Min Sung, Bong Seok Choi, Bong Yeol Choi and Yeong Ho Ha, "Perceptual Quality Assessment on Display based on Analytic Network Process," *The Journal of The institute of Electronics Engineers of Korea*, vol. 51, no. 7, pp. 180 – 189 Jul. 2014.
- [11] Dae Chul Kim, Wang Jun Kyung, Cheol Hee Lee and Yeong Ho Ha, "Moire Reduction in Digital Still Camera by using Inflection Point in Frequency Domain," *The Journal of The institute of Electronics Engineers of Korea*, vol. 51, no. 1, pp. 152 – 157 Jan. 2014.
- [12] Dae Chul Kim, Bong Seok Choi, Myong Hui Choi and Yeong Ho Ha, " Color Smear Reduction in Digital Camera without Optical Low Pass Filter," *The Journal of Korean Society for Imaging Science and Technology*, vol. 19, no. 3, pp. 18 – 23, Dec. 2013
- [13] Ran Shu, Ho Gun Ha, Dae Chul Kim, and Yeong Ho Ha, "Integrated Color Matching in Stereoscopic Image by Combining Local and Global Color Compensation," *The Journal of The institute of Electronics Engineers of Korea*, vol. 50, no. 12, pp. 168 – 175, Oct. 2013
- [14] Youn Chul Ock, and Yeong Ho Ha, "Symbol Timing Offset Estimation for OFDM using the 1 Symbol Offset Training Symbol and Controlled CP Power," *The Journal of The institute of Electronics Engineers of Korea*, vol. 50, no. 12, pp. 3 – 13, Oct. 2013

- [15] Ji Hoon Yoo, Ho Gun Ha, Dae Chul Kim, and Yeong Ho Ha, "Spectral Reflectance Estimation based on Similar Training Set using Correlation Coefficient," *The Journal of The institute of Electronics Engineers of Korea*, vol. 50, no. 10, pp. 142 – 149, Oct. 2013
- [16] Bong Seok Choi, Dae Chul Kim, Cheol Hee Lee, and Yeong Ho Ha, "Multi-Spectral Flash Imaging using Region-based Weight Map," *The Journal of The institute of Electronics Engineers of Korea*, vol. 50, no. 9, pp. 125 – 133, Sep. 2013
- [17] Dae Chul Kim, Cheol Hee Lee, Myong Hui Choi and Yeong Ho Ha, " Skin Detection Method using Color Space Based Methods and Focus Region," *The Journal of Korean Society for Imaging Science and Technology*, vol. 18, no. 4, pp. 16 – 22, Dec. 2012
- [18] Il Su Park, Ho Gun Ha, and Yeong Ho Ha, "Color Reproduction in DLP Projector using Hue Shift Model according to Additional White Channel," *The Journal of The institute of Electronics Engineers of Korea*, vol. 49, no. 4, pp. 428 – 436, Jul. 2012
- [19] In Young Song, Ho Gun Ha, and Yeong Ho Ha, "Detail Enhancement by Spatial Gamut Mapping Based on Local Contrast Compensation," *The Journal of The institute of Electronics Engineers of Korea*, vol. 49, no. 4, pp. 446 – 454, Jul. 2012
- [20] Dae Chul Kim, Wang Jun Kyung, and Yeong Ho Ha, "Selective Skin Tone Reproduction using Preferred Skin Colors," *The Journal of The institute of Electronics Engineers of Korea*, vol. 49, no. 4, pp. 398 – 403, Jul. 2012
- [21] Ho Gun Ha, Wang Jun Kyung, Dae Chul Kim, and Yeong Ho Ha, "Modified Local Color Transfer with Color Category Map," *The Journal of The institute of Electronics Engineers of Korea*, vol. 49, no. 3, pp. 67 – 73, May 2012
- [22] Wang Jun Kyung, Dae Chul Kim, Cheol Hee Lee, and Yeong Ho Ha, "Faded Color Correction using Classification Map in LCyBCrg Color Space," *The Journal of The institute of Electronics Engineers of Korea*, vol. 49, no. 2, pp. 1 – 7, Mar. 2012
- [23] Tae Hyoung Lee, Ho Gun Ha, Cheol Hee Lee, and Yeong Ho Ha, "Super Resolution Reconstruction from Multile Exposure Images," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 49, no. 1, pp. 73-80, Jan. 2012
- [24] Woo Heon Jang, Tae Hyoung Lee, Dae Chul Kim, Cheol Hee Lee, and Yeong Ho Ha, "Lightness Compensation for Anaglyph Images to Reduce Retinal Rivalry," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 49, no. 1, pp. 88-96, Jan. 2012.
- [25] Ho Gun Ha, In Su Jang, Tae Hyoung Lee, and Yeong Ho Ha, "Estimation of Gamut Boundary based on Modified Segment Maxima to Reduce Color Artifacts," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 48, no. 3, pp. 412-418, May 2011.
- [26] Tae Hyoung Lee, Ho Gun Ha, and Yeong Ho Ha, "Estimation of Differently Exposed Low Dynamic Range Images from a Single Bayer Image," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 48, no. 2, pp.239-244, Mar. 2011.
- [27] Wang Jun Kyung, Tae Hyoung Lee, Cheol Hee Lee, and Yeong Ho Ha, "Enhanced Integrated Multi-scale Retinex based on CIELAB Color Space for Improving Color Reproduction," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 48, no. 1, pp. 1-7, Jan. 2011.
- [28] Dae Chul Kim, Tae-Hyoung Lee, and Yeong Ho Ha, "Color Correction for Projected Image on Light Colored Screen using a Still Camera," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 48, no. 1, pp. 16-22, Jan. 2011.
- [29] Myong Hui Choi, Wang Jun kyung, and Yeong Ho Ha, "Van der Waerden Test Statistic for Efficient Edge Detection in Color Images, " *The Journal of Korean Society for Imaging Science and Technology*, vol. 16, no. 4, pp. 38-45, Dec. 2010
- [30] In Su Jang, Chang Hwan Son, Kyung Man Kim, and Yeong Ho Ha, "Adaptive Color Correction Method to Monitor in Color Laser Printer," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 47, no. 4, pp. 434-439, Jul. 2010
- [31] Tae Hyoung Lee, Wang Jun Kyung, Cheol Hee Lee, and Yeong Ho Ha, "Auto-Exposure Control using Loop-Up Table Based on Scene-Luminance Curve in Mobile Phone Camera," *The Journal of*

- The Institute of Electronics Engineers of Korea*, vol. 47, no. 4, pp. 427-433, Jul. 2010
- [32] Kyung Woo Ko, In Su Jang, Wang Jun Kyung, and Yeong Ho Ha, "Saturation Compensating Method by Embedding Pseudo-Random Code in Wavelet Packet Based Colorization," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 47, no. 4, pp. 391-398, Jul. 2010.
- [33] Ho Gun Ha, In Su Jang, Kyung Woo Ko, and Yeong Ho Ha, "Subpixel Shift Estimation in Noisy Image Using Iterative Phase Correction of a Selected Local Region," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 47, no. 1, pp. 103-111, Jan. 2010.
- [34] Kyung Woo Ko, Cheol Hee Lee, and Yeong Ho Ha, "Improved Cancellation of Impulse Noise Using Rank-Order Method," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 46, no. 4, pp. 388-395, Jul. 2009.
- [35] Kyung Woo Ko, Tae Yong Park, and Yeong Ho Ha, "Relationship between Color Image Compression and Gamut Variation Using JPEG and JPEG2000," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 46, no. 4, pp. 396-402, Jul. 2009.
- [36] In Su Jang, Kee Hyon Park, and Yeong Ho Ha, "Reduction of Color Distortion by Estimating Dominant Chromaticity in Multi-scaled Retinex," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 46, no. 3, pp. 52-58, May 2009.
- [37] Oh Seol Kwon, Dong Chang Lee, Cheol Hee Lee, and Yeong Ho Ha, "Image Mosaicking Using Feature Points based on Color-Invariant," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 46, no. 2, pp. 199-208, Mar. 2009.
- [38] Oh Seol Kwon, Kyung Woo Ko, and Yeong Ho Ha, "Characterization and Color Reproduction Based on Average Picture Level of PDP Displays," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 45, no. 5, pp. 9-17, Sep. 2008.
- [39] In Su Jang, Chang Hwan Son, Cheol Hee Lee, Kun Woen Song, and Yeong Ho Ha, "Improved Characterization Method for Mobile Phone Camera and LCD Display," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 45, no. 2, pp. 65-73, Mar. 2008.
- [40] Dae Keun Park, Kee Hyon Park, and Yeong Ho Ha, "Acquisition of HDR Image Using Estimation of Scenic Dynamic Range in Images with Various Exposures," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 45, no. 2, pp. 10-20, Mar. 2008.
- [41] Tae Yong Park, Cheol Hee Lee, and Yeong Ho Ha, "Evaluation of Color Reproduction Characteristics of TFT-LCD and AMOLED for Mobile Phone," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 45, no. 1, pp. 29-37, Jan. 2008.
- [42] Kyung Woo Ko, Oh Seol Kwon, Chang Hwan Son, and Yeong Ho Ha, "Colorization Algorithm Using Wavelet Packet Transform," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 45, no. 1, pp. 1-10, Jan. 2008.
- [43] Oh Seol Kwon, In Su Jang, and Yeong Ho Ha, "Algorithm of Color Reproduction for Deriving with Low-Power in PDP TV," *The Journal of Korean Society for Imaging Science and Technology*, vol. 13, no. 4, pp. 264-272, Dec. 2007.
- [44] Kyung Woo Ko, Oh Seol Kwon, Eun Young Kwon, Myong Hui Choi, and Yeong Ho Ha, "Preference Color Mapping Method for Skin Regions Based on the Lightness and Color Distribution of the Image," *The Journal of Korean Society for Imaging Science and Technology*, vol. 13, no. 3, pp. 159-166, Sep. 2007.
- [45] Joong Hyun Kim, Chang Hwan Son, In Su Jang, and Yeong Ho Ha, "Six-Color Separation based on Limitation of Colorant Amount and Dot Visibility Ordering," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 44, no. 6, pp. 35-46, Nov. 2007.
- [46] Chang Hwan Son, Cheol Hee Lee, and Yeong Ho Ha, "Color Correction of a Projected Image on Colored-Screen for Beam-Projector," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 44, no. 4, pp. 35-43, Jul. 2007.
- [47] Tae Yong Park, Kee Hyon Park, and Yeong Ho Ha, "Multitoning Method Based on Arrangement of Ink Distribution for Smooth Tone Transition," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 44, no. 4, pp. 17-25, Jul. 2007.

- [48] Tae Hyoung Lee, Oh Seol Kwon, Tae Yong Park, and Yeong Ho Ha, "Hue Shift Model and Hue Correction in High Luminance Display," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 44, no. 4, pp. 60-69, Jul. 2007.
- [49] Jong Man Kim, Chang Hwan Son, Sung Dae Cho, and Yeong Ho Ha, "Illuminant-Adaptive Color Reproduction for a Mobile Display," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 44, no. 2, pp. 63-73, Mar. 2007.
- [50] In Su Jang, Chang Hwan Son, Tae Yong Park, and Yeong Ho Ha, "Inverse Characterization Method for Color Gamut Extension in Multi-Color Printer," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 44, no. 2, pp. 46-54, Mar. 2007.
- [51] Myong Young Lee, Kun Weon Song, Cheol Hee Lee, and Yeong Ho Ha, "Physical-based Rendering Method for Lamp-lit Simulation of Automotive Rear Lamp," *The Journal of Korean Society for Imaging Science and Technology*, vol. 12, no. 4, pp. 123-136, Dec. 2006.
- [52] Myong Young Lee, Cheol Hee Lee, and Yeong Ho Ha, "Rendering Method of Light Environment Based on Modeling of Physical Characteristic," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 43, no. 6, pp. 46-56, Nov. 2006.
- [53] Kee Hyon Park, Oh Seol Kwon, Chang Hwan Son, and Yeong Ho Ha, "Mobile LCD Characterization using XYZ Electro-Optical Transfer Functions for RGBCMYK Components," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 43, no. 6, pp. 1-10, Nov. 2006.
- [54] Kyung Woo Ko, Oh Seol Kwon, Chang Hwan Son, and Yeong Ho Ha, "Improved Gray-to-color Algorithm based on Analysis of Wavelet Packet Sub bands," *The Journal of Korean Society for Imaging Science and Technology*, vol. 12, no. 3, pp. 68-75, Sep. 2006.
- [55] In Su Jang, Chang Hwan Son, Tae Yong Park, and Yeong Ho Ha, "Six Color Printer Characterization Method based on Color Correlation," *The Journal of Korea Society for Imaging Science and Technology*, vol. 12, no. 2, pp. 60-67, Jun. 2006.
- [56] Oh Seol Kwon, Chang Hwan Son, Tea Yong Park, and Yeong Ho Ha, "Estimation of Spectral Reflectance Based on Virtual Sensitivity Using Camera Spectral Characteristics," *The Journal of Korean Society for Imaging Science and Technology*, vol. 12, no. 2, pp. 44-51, Jun. 2006.
- [57] Kwang Min Jeong, Jeong Yeop Kim, Ki Ho Hyun, and Yeong Ho Ha, "Analysis of Uniqueness and Robustness Properties of Ordinal Signature for Video Matching," *The Journal of The Korea MultiMedia Society*, vol. 9, no. 5, pp. 576-584, May 2006.
- [58] Kee Hyon Park, Yeong Ho Ha, and Cheol Hee Lee, "Characterization Method and Color Matching Technology for Mobile Display, " *The Journal of Korea Multimedia Society*, vol. 9, no. 4, pp. 434-442, Apr. 2006.
- [59] Chang Hwn Son, Tae Yong Park, Cheol Hee Lee, and Yeong Ho Ha, "Implementation of the Color Matching Between Mobile Camera and Mobile LCD Based of RGB LUT," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 43, no. 3, pp. 25-33, May 2006.
- [60] Tae Yong Park, Myong Young Lee, Chang Hwn Son, and Yeong Ho Ha, "Banding Artifacts Reduction Method in Multitoning Based on Threshold Modulation of MJBNM, " *The Journal of The Institute of Electronics Engineers of Korea*, vol. 43, no. 2, Mar. 2006.
- [61] Tae Yong Park, Myong Young Lee, Kee Hyon Park, and Yeong Ho Ha, "Design and Implementation of Digital Photo Kiosk System with Auto Color Corrcction Module, " *The Journal of The Institute of Electronics Engineers of Korea*, vol. 43, no. 2, Mar. 2006.
- [62] Jae Hyun Kwon, Chang Hwan Son, Tae Yong Park, Yang Ho Cho, and Yeong Ho Ha, "Adaptive Error Diffusion for Text Enhancement," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 43, no. 1, pp. 9-16, Jan. 2006.
- [63] Yang Ho Cho, Oh Seol Kwon, Chang Hwan Son, Tae Yong Park, and Yeong Ho Ha, "Gamut Mapping and Extension Method in the xy Chromaticity Diagram for Various Display Devices," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 43, no. 1, pp. 45-54, Jan. 2006.
- [64] Dong Woo Kang, Yang Ho Cho, Yun Tae Kim, Won Hee Choe, and Yeong Ho Ha, "Color Decomposition Method for Multi-Primary Display Using 3D-LUT in Linearized LAB Space," *The*

- Journal of The Institute of Electronics Engineers of Korea*, vol. 42, no. 6, pp. 779-788, Nov. 2005.
- [65] Hae Bong Im, Yang Ho Cho, Kee Hyon Park, and Yeong Ho Ha, "Inverse Characterization Method Based on 9 Channel Tone Response Curves for Display Device," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 42, no. 5, pp. 85-94, Sep. 2005.
- [66] Chang Hwan Son, Yang Ho Cho, Oh Seol Kwon, and Yeong Ho Ha, "Six Color Separation Using Additional Colorant and Quantitative Granularity Metric for Photography Quality," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 42, no. 4, pp. 49-58, Jul. 2005.
- [67] Jae Seung Choi, Ick Hwan Kim, Jae Yeal Nam, and Yeong Ho Ha, "Design and Implementation of Image Display Module for Low-Cost High Definition Television," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 42, no. 3, pp. 65-72, May 2005.
- [68] Jae Seung Choi, Dong Seog Han, Yun Jung Lee, Jae Yeal Nam, and Yeong Ho Ha, "Design and Implementation of DVB-T Receiver System Based on OFDM," *The Journal of Korea Multimedia Society*, vol. 8, no. 3, pp. 362-371, Mar. 2005.
- [69] Hyun Woo Kim, Ho Keun Lee, Myong Young Lee, and Yeong Ho Ha, "Digital Watermarking of EZW Coded Image using ZTR symbol," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 42, no. 6, pp. 43-50, Jan. 2005.
- [70] Chang Hwan Son, Yun Tae Kim, Yang Ho Cho, and Yeong Ho Ha, "Six Color Separation Using the Lightness Value and Quantitative Granularity," *The Journal of Korean Society for Imaging Science and Technology*, vol. 10, no. 1, pp. 35-42, 2004.
- [71] Ick Hwan Kim, Jae Seung Choi, Yeong Cheol Im, Yun Jung Lee, Jae Yeal Nam, and Yeong Ho Ha, "Design and Implementation of Multimedia Functional Module for Digital TV," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 41, no. 6, pp. 231-237, Nov. 2004.
- [72] Kee Hyon Park, Myong Young Lee, Cheol Hee Lee, and Yeong Ho Ha, "Color Matching Between Monitor and Mobile Display Device Using Improved S-curve Model and RGB Color LUT," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 41, no. 6, pp. 33-41, Nov. 2004.
- [73] Chang Hwan Son, Yun Tae Kim, Yang Ho Cho, and Yeong Ho Ha, "Six Color Separation for Reducing Graininess in a Middle Tone Region," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 41, no. 6, pp. 51-59, Nov. 2004.
- [74] Tae Yong Park, Yang Ho Cho, Myong Young Lee, and Yeong Ho Ha, "Multi-level Vector Error Diffusion Based on Primary Color Selection Considering Lightness," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 41, no. 5, Sep. 2004.
- [75] Oh Seol Kwon, Yang Ho Cho, Yun Tae Kim, Kun Woen Song, and Yeong Ho Ha, "Illumination Estimation Based on Valid Pixel Selection from CCD Camera Response," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 41, no. 5, pp. 251-258, Sep. 2004.
- [76] Se Hoon Park, Yun Jung Lee, and Yeong Ho Ha, "Discontinuous Zigzag Gait Planning of Quadruped Walking Robot with an Articulated Spine," *The Journal of Control, Automation, and Systems Engineering*, vol. 10, no. 8, pp. 703-710, Aug. 2004.
- [77] Cheol Whan Kim, Ho Keun Lee, and Yeong Ho Ha, "A Stereo Matching Algorithm in Pixel-Based Disparity Space Image," *The Journal of The Korean Institute of Communication Sciences*, vol. 29, no. 6, pp. 426-434, Jun. 2004.
- [78] Myong Hee Choi, Ho Keun Lee, Joo Won Lee, and Yeong Ho Ha, "A Robust Edge Detection Method Using Vander Waerden Statistic," *The Journal of The Institute of Electronics Engineers of Korea*, May 2004.
- [79] Soon Chang Lee, Yang Ho Cho, Yun Tae Kim, Cheol Hee Lee, and Yeong Ho Ha, "Improved Vector Error Diffusion for Reduction of Smear Artifact in the Boundary Regions," *The Journal of The Institute of Electronics Engineers of Korea*, May 2004.
- [80] Oh Seol Kwon, Ho Keun Lee, Myong Young Lee, and Yeong Ho Ha, "Illumination Estimation Based on Noise Response Modeling of Digital Camera in a Real-World Image," *The Journal of Korean Society for Imaging Science and Technology*, Seoul, Korea, pp. 1-8, Feb. 2004.
- [81] Yun Tae Kim, Yang Ho Cho, Ho Keun Lee, and Yeong Ho Ha, "Color Look-Up Table Design for

- Gamut Mapping and Color Space Conversion," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 41, no. 2, Jan. 2004.
- [82] Myong Young Lee, Ho Keun Lee, Cheol Hee Lee, and Yeong Ho Ha, "Ray Tracing Method Based on Spectral Distribution for Reproducing a Realistic Image," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 41, no. 1, pp. 37-46, Jan. 2004.
- [83] Yun Tae Kim, Yang Ho Cho, Cheol Hee Lee, and Yeong Ho Ha, "Modified Jointly Blue Noise Mask Approach Using S-CIELAB Color Difference," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 40, no. 4, pp. 1-10, Jul. 2003.
- [84] Jong Phil Kim, Suk Chul Ahn, Yeong Ho Ha, and Yoichi Miyake, "Prediction of Color Reproduction in Printing Image Based on Principal Component Analysis of Spectral Reflectance of Ink," *The Journal of Korean Society for Imaging Science and Technology*, vol. 9, no. 1, pp. 1-8, Jun. 2003.
- [85] Ho Keun Lee and Yeong Ho Ha, "Stereo Sequence Transmission Using Concealment of Disparity Information on Color Channels," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 40, no. 2, pp. 29-36, Mar. 2003.
- [86] Oh Seol Kwon, Cheol Hee Lee, Ho Keun Lee, and Yeong Ho Ha, "Improved Spectral-Reflectance (SR) Estimation Using Set of Principle Components Separately Organized for Each SR Population with Similar SRs," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 40, no. 2, pp. 11-19, Mar. 2003.
- [87] Jae Min Shin, Ho Keun Lee, and Yeong Ho Ha, "Windowed Wavelet Stereo Matching using Shiftability," *The Journal of The Korean Institute of Communication Sciences*, vol. 28, no. 1, pp. 56-63, Jan. 2003.
- [88] Yun Tae Kim, Yang Ho Cho, Cheol Hee Lee, and Yeong Ho Ha, "Halftoning Method Using the Dispersed CMY Dithering and Blue Noise Mask," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 40, no. 1, pp. 1-9, Jan. 2003.
- [89] Myong Young Lee, Yun Tae Kim, Yang Ho Cho, and Yeong Ho Ha, "Ray Tracing Method Based on Spectral Distribution for Reproducing a Realistic Image," *The Journal of Korean Society for Imaging Science and Technology*, vol. 8, no. 2, pp. 9-16, Dec. 2002.
- [90] Yang Ho Cho, Yun Tae Kim, Cheol Hee Lee, and Yeong Ho Ha, "Gamut Mapping Based on Color Space Division for Enhancement of Lightness Contrast and Chrominance," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 39, no. 5, pp. 37-45, Sep. 2002.
- [91] Gak Min, Kyu Phil Han, Ki Soo Lee, and Yeong Ho Ha, "3D Object Extraction Algorithm Based on Hierarchical Approach Using Reduced Windowed Fourier Phase," *The Journal of The Korean Institute of Communication Sciences*, vol. 27, no. 8A, pp. 779-785, Aug. 2002.
- [92] Oh Ju Kwon, Ho Keun Lee, and Yeong Ho Ha, "Pre-distorter Method Using LUT with 21 Partition Interpolation in the OFDM System," *The Journal of The Korean Institute of Communication Sciences*, vol. 27, no. 7A, pp. 668-675, Jul. 2002.
- [93] Ho Keun Lee, Kyu Phil Han, and Yeong Ho Ha, "Hierarchical 3D Modeling Using Disparity-Motion Relationship and Feature Points," *The Journal of the Institute of Electronics Engineers of Korea*, vol. 39, no. 1, pp. 9-16, Jan. 2002.
- [94] Oh Ju Kwon and Yeong Ho Ha, "Multi-carriers PAPR Reduction Method using Adaptive Sub-optimal PTS with Threshold," *The Journal of The Korean Institute of Communication Sciences*, vol. 26, no. 12, pp. 2012-2018, Dec. 2001.
- [95] Keun Won Song, Kyung Man Kim, Gak Min, Chae Soo Lee, Jae Yeol Nam, and Yeong Ho Ha, "Image Segmentation Using A Combined Segmentation Measure for Region-Based Coding," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 38, no. 5, pp. 66-76, Sep. 2001.
- [96] Hee Soo Kim, Ho Young Lee, and Yeong Ho Ha, "Digital Watermarking for Color Still Images," *The Journal of The Korean Institute of Communication Sciences*, vol. 26, no. 8, Aug. 2001.
- [97] Tae Min Bae, Jin Woo Park, Ho Keun Lee and Yeong Ho Ha, "Stereoscopic Sequence Coding Using MPEG-2 MVP," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 38, no. 4, pp.

29-38, Jul. 2001.

- [98] Yang Woo Park, Chae Soo Lee, and Yeong Ho Ha, "Lightness Mapping for Uniform Color Change and Gamut Mapping for Maximum Chroma Reproduction," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 38, no. 4, pp. 47-56, Jul. 2001.
- [99] Hee Soo Kim, Yun Tae Kim, Cheol Hee Lee, and Yeong Ho Ha, "Estimation of Spectral Distribution of Illumination Using Maximum Achromatic Region," *The Journal of the Institute of Electronics Engineers of Korea*, vol. 38, no. 4, Jul. 2001.
- [100] Chae Soo Lee, Yang WooPark, Tae Uk Um, Ju Seok Jang, and Yeong Ho Ha, "Model-Based Dithering Using Dot Pattern Selection," *The Journal of the Institute of Electronics Engineers of Korea*, vol. 38, no. 4, pp. 11-21, Jul. 2001.
- [101] Ho Young Lee, Ho Keun Lee, Yun Tae Kim, and Yeong Ho Ha, "Color-Based Image Retrieval and Localization Using Color Vector Angle," *The Journal of the Korean Institute of Communication Sciences*, vol. 26, no. 6, Jun.. 2001.
- [102] Jeong Yeop Kim and Yeong Ho Ha, "Estimation of Illuminant Chromaticity from Single Color Image Using Perceived Illumination and Highlight," *The Journal of the Institute of Electronics Engineers of Korea*, vol. 38, no. 3, May 2001.
- [103] Tae Jun Kang, Eui Yoon Chung, Sun Kyu Kwon, and Yeong Ho Ha, "Design of an Efficient VLSI Architecture of SADCT Based on Systolic Array," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 38, no. 3, May 2001.
- [104] Hong Yan Jin, Ho Young Lee, Hee Soo Kim, Gi Seok Kim, and Yeong Ho Ha, "Content-Based Image Retrieval Using Color Adjacency and Gradient," *The Journal of the Institute of Electronics Engineers of Korea*, vol. 38, no. 1, pp. 104-115, Jan. 2001.
- [105] Yeong Ho Ha, Hee Soo Kim, Jae Chul Kim, Dong Wook Kim, Han Soo Han, Suk Kyeong Kim, and Joong Lee, "An Effective Multiresolution Image Restoration Using the Directional Information," *Korean Journal of Forensic Science*, Vol. 1, no.1, pp. 27-32, Dec. 2000.
- [106] Oh Ju Kweon, Min Ho Ka, and Yeong Ho Ha, "Chirp-Stitching Technology for Wide Band Signal Acquisition of the High Resolution Synthetic Aperature Radar," *The Journal of the Korean Institute of Communication Sciences*, vol. 25, no. 10, Oct. 2000.
- [107] Cheol Hee Lee, Hee Soo Kim, Suk Chul Ahn, and Yeong Ho Ha, "Determination of Color Samples Uniformity Distributed in Printer Gamut and its Application to Color Reproduction," *The Journal of the Institute of Electronics Engineers of Korea*, vol. 37, no. 5, pp. 414-425, Sep. 2000.
- [108] Weon Hee Choi, Cheol Hee Lee, Jeong Yeop Kim, Hee Soo Kim, and Yeong Ho Ha, "Color Halftoning Based on Color Correction Using Vector Error Diffusion," *The Journal of the Institute of Electronics Engineers of Korea*, vol. 37, no. 5, pp. 426-433, Sep. 2000.
- [109] Ho Young Lee, Young Tae Kim, Hee Soo Kim, Tae Min Bae, and Yeong Ho Ha, "Efficient Color Feature Information Extraction Method for Color Histogram-based Image Retrieval," *The Journal of the Korean Institute of Communication Sciences*, vol. 25, no. 8, pp. 1413-1423, Aug. 2000.
- [110] Ju Kweon, Kwang Uk Lee, and Yeong Ho Ha, "Performance Analysis of On Board Processing in Communication Satellite Against Jamming Environment," *The Journal of the Korean Institute of Communication Sciences*, vol. 25, no. 7B, pp. 1185-1193, Jul. 2000.
- [111] Jae Kyoung Moon, Soon Yong Park, Min Taek Kim, Jong Sick Choe, and Yeong Ho Ha, "A Channel Estimation for CoFDM Systems in Time-Varying Multipath Fading Channels," *The Journal of the Korean Institute of Communication Sciences*, vol. 25, no. 5A, pp. 618-633, May 2000.
- [112] Sun Kyu Kwon, Tae Min Bae, Kyu Phil Han, Eui Yoon Chung, and Yeong Ho Ha, "Object-based Stereoscopic Video Coding Using Image Segmentation and Prediction," *The Journal of the Korean Institute of Communication Sciences*, vol. 24, no. 12, pp.2349-2358, Dec. 1999.
- [113] Sang Yeol Lee, Eui Yoon Chung, Ho Young Lee, Hee Soo Kim, and Yeong Ho Ha, "VLSI Architecture Design of Reconstruction Filter for Morphological Image Segmentation," *The Journal of the Korea Institute of Telematics and Electronics*, vol. 36, no. 12, pp. 1427-1436, Dec. 1999.

- [114] Hyung Suk Kim, Jin Woo Park, Hee Soo Kim, Kyu Phil Han, and Yeong Ho Ha, "Simplification of 3D Polygonal Mesh Using Non-Uniform Subdivision Vertex Clustering," *The Journal of the Korean Institute of Communication Sciences*, vol. 24, no. 10, pp.1937-1945, Oct. 1999.
- [115] Kyu Phil Han, Eui Yoon Chung, Gak Min, Gi Seok Kim, and Yeong Ho Ha, "A Compact Stereo Matching Algorithm Using Modified Population-based Incremental Learning", *The Journal of the Korea Institute of Telematics and Electronics*, vol. 36, no. 10, pp. 103-112, Oct. 1999.
- [116] Jae Min Lee, Kyoung Man Kim, Cheol Hee Lee, Chae Soo Lee, and Yeong Ho Ha, "Color Discrimination Enhancement Gamut Mapping Using Color Distribution Rearrangement", *The Journal of the Korea Institute of Telematics and Electronics*, vol. 36, no. 10, pp. 58-71, Oct. 1999.
- [117] Chae Soo Lee, Cheol Hee Lee, and Yeong Ho Ha, "Gamut Mapping Using Variable Multiple Anchor Points for Continuous-Tone Color Reproduction," *The Journal of the Korea Institute of Telematics and Electronics*, vol. 36, no. 8, pp.55-64, Aug. 1999.
- [118] Cheol Hee Lee, Chae Soo Lee, Suk Chul Ahn, and Yeong Ho Ha, "Linear Tone-reproduction of Printer Using Neural Network", *Journal of the Korean Society for Imaging Science & Technology*, vol. 5, no. 1, pp.9-19, Jun. 1999.
- [119] Jae Kyoung Moon, Jae Woen Kim, Song In Choi, Ki Cheol Han, Yeong Ho Ha, and Su Jung Kim, "Performance Analysis of Adaptive System Using MPSK and MQAM for Rayleigh Fading Channel," *The Journal of the Korean Institute of Communication Sciences*, vol. 24, no. 6A, pp.782-790, Jun. 1999.
- [120] Cheol Hee Lee, Chae Soo Lee, Bong Su Kang, Eung Joo Lee, and Yeong Ho Ha, "Printer Calibration for Linearly Perceived Tone Reproduction," *The Journal of the Korea Institute of Telematics and Electronics*, vol. 36, no. 4, pp.55-69, Apr. 1999.
- [121] Yang Woo Park, Tae Uk Uam, Chu Seok Chang, and Yeong Ho Ha, "Adaptive Error Diffusion Using Fussy Relaxation Technique," *The Journal of the Korea Institute of Telematics and Electronics*, vol. 36, no. 5, pp.42-47, May 1999.
- [122] Kyu Phil Han, Tae Min Bae, Eui Yoon Chung, Hee Soo Kim, and Yeong Ho Ha, "Stereo Matching Using Genetic Algorithm and Region Information," *The Journal of the Korea Institute of Telematics and Electronics*, vol. 36, no. 3, pp.97-105, Mar. 1999.
- [123] Jae Kyoung Moon, Kil Nam Oh, Jae Hong Park, Yeong Ho Ha, and Soo Joong Kim, "Performance of Symbol Timing Recovery for 16QAM Systems in Frequency Nonselective Channel," *The Journal of the Korea Institute of Communication Sciences*, vol. 24, no. 2B, pp.196-204, Feb. 1999.
- [124] Jae Kyoung Moon, Kil Nam Oh, Jae Hong Park, Yeong Ho Ha, and Su Jung Kim, and Yeong Ho Ha, "Performance of Time-averaging Channel Estimator for OFDM System of Terrestrial Broadcasting Channel," *The Journal of Korea Electromagnetic Engineering Society*, vol. 10, no.1, pp.44-53, Feb.1999.
- [125] Kun WoenSong, Young Sik Park, Kyu Phil Han, Jae Yeal Nam, and Yeong Ho Ha, "Hierarchical Image Segmentation Based on HVS Characteristic for Region-based Very Low Bit Rate Coding," *The Journal of the Korea Institute of Telematics and Electronics*, vol. 36, no. 1, pp.70-80, Jan. 1999.
- [126] Shin Dong Kim, Kyeong Man Kim, Chae Soo Lee, Cheol Hee Lee, and Yeong Ho Ha, "Image Dependent Gamut Mapping Using the Variable Anchor Point Based on the change of lightness," *The Journal of the Korea Institute of Telematics and Electronics*, vol. 36, no. 1, pp.38-50, Jan. 1999.
- [127] Gi Seok Kim, Young Sik Park, Kun WoenSong, Eui Yoon Chung, Yong Suk Kim, and Yeong Ho Ha, "Efficient Contour Coding for Segmentation-based Image Coding," *The Journal of the Korea Institute of Telematics and Electronics*, vol. 35, no. 9, pp.1614-1627, Nov. 1998.
- [128] Jin Woo Park, Kun Woen Song, Young Sik Park, Jae Yeal Nam, and Yeong Ho Ha, "3D Synthetic Image Compression Based on Adaptive Bit Allocation and DFSVQ," *The Journal of the Korean Institute of Communication Sciences*, vol. 23, no. 10, pp. 2839-2841, Oct. 1998.
- [129] Tae Min Bae, Kyu Phil Han, Ho Young Lee, Eui Yoon Chung, and Yeong Ho Ha, "Multiresolutional Block-based Stereo Sequence Coding," *The Journal of the Korea Institute of Communication Sciences*, vol. 23, no. 9B, pp. 2539-2550, Sep. 1998.



- [130] Jin Soo Choi, Young Sik Park, and Yeong Ho Ha, "Fractal Image Coding Using Block Classification in the DCT Domain," *The Journal of The Korean Institute of Communication Sciences*, vol. 23, no. 9B, pp. 2516-2528, Sep. 1998.
- [131] Yong Suk Kim, Kyu Phil Han, Gi Seok Kim, and Yeong Ho Ha, "Stereo Matching Using Genetic Algorithm," *The Journal of the Korea Institute of Telematics and Electronics*, vol. 35, no. 9, pp.53-62, Sep. 1998.
- [132] Young Sik Park, Kun Woen Song, Kyu Phil Han, Ho Young Lee, Jae Yeal Nam, and Yeong Ho Ha, "Hierarchical Image Segmentation by Binary Split for Region-based Image Coding," *The Journal of the Korea Institute of Telematics and Electronics*, vol. 35, no. 8, pp.68-76, Aug. 1998.
- [133] Chae Soo Lee, Kyeong Man Kim, Cheol Hee Lee, and Yeong Ho Ha, "Color Gamut Mapping and Dithering for Ink-Jet Color Printing," *The Journal of the Korea Institute of Telematics and Electronics*, vol. 35, no. 6, pp. 137-145, Jun. 1998.
- [134] Kyeong Man Kim, Cheol Hee Lee, Chae Soo Lee, and Yeong Ho Ha, "Color Image Enhancement by Fundamental Vector Transformation and Nonlinear Mapping," *The Journal of Electrical Engineering and Information Science*, vol. 3, no. 3, pp.330-335, Jun. 1998.
- [135] Kun Woen Song, Gi Seok Kim, Young Sik Park, Ho Young Lee, and Yeong Ho Ha, "Image Segmentation Based on Hierarchical Structure and Region Merging Using Contrast for Very Low Bit Rate Coding," *The Journal of the Korea Institute of Telematics and Electronics*, vol.34, no.11, pp. 120-113, Dec. 1997.
- [136] Hyun Sik Ahn, Chin Tae Choi, Kwan Hee Lee, Ki Tae Shin, and Yeong Ho Ha, "A Vision System for Autonomous Material Handling by Static and Dynamic Range Finding," *The Journal of the Korea Institute of Telematics and Electronics*, vol.34, no.10, pp. 59-70, Oct. 1997.
- [137] Eui Yoon Chung, Young Sik Park, Kun Woen Song, Kyu Phil Han, and Yeong Ho Ha, "Improved Changed Region Detection and Motion Estimation for Object-Oriented Coding," *The Journal of the Korean Institute of Communication Sciences*, vol.22, no.9, pp. 2043-2052, Sep. 1997.
- [138] Kyu Phil Han, Yong Suk Kim, Young Sik Park, Kun Woen Song, and Yeong Ho Ha, "Relaxation Algorithm to Solve Correspondence Problem Based on Possibility Distribution," *The Journal of the Korea Institute of Telematics and Electronics*, vol.34, no.9, pp. 109-118, Sep. 1997.
- [139] In Gab Jeong, Yong Suk Kim, Ki Ho Hyun, Eung Joo Lee, and Yeong Ho Ha, "Range Image Segmentation and Classification Using Cooperative Relaxation Algorithm Between H-K Curvatures," *The Journal of the Korea Institute of Telematics and Electronics*, vol.34, no.8, pp. 872-879, Aug. 1997.
- [140] Eung Joo Lee and Yeong Ho Ha, "Favorite Color Correction for Color Enhancement in Color Application System," *The Journal of the Korean Institute of Communication Sciences*, vol.22, no.7, pp. 1566-1573, Jul. 1997.
- [141] Yeong Zun Yeo, Kun Woen Song, Young Sik Park, Gi Seok Kim, and Yeong Ho Ha, "Hierarchical 3D Segmentation of Image Sequence Using Motion Information Based on mathematical Morphology," *The Journal of the Korea Institute of Telematics and Electronics*, vol.34, no.7, pp. 78-88, Jul. 1997.
- [142] Jae Yeal Nam, Byung Ho Kang, Ho Young Lee, and Yeong Ho Ha, "Study of an Adaptive Multichannel Rate Control Scheme for HDTV Encoder," *The Journal of the Korea Institute of Broadcasting Engineering*, vol.2, no.1, pp. 56-64, Jun. 1997.
- [143] Eung Joo Lee, Gwang Choon Lee, and Yeong Ho Ha, "Skin Color Reappearance for Color Enhancement in TV," *The Journal of the Korea Institute of Telematics and Electronics*, vol.34, no.6, pp. 600-607, Jun. 1997.
- [144] Cheol Hee Lee, Chae Soo Lee, Kyeong Man Kim, and Yeong Ho Ha, "Color Matching Using Dot Gain and Intensity Compensation for Different Papers," *The Journal of the Korea Institute of Telematics and Electronics*, vol.34, no.5, pp. 73-85, May 1997.
- [145] Ho Young Lee, Gi Seok Kim, Young Sik Park, Kun Woen Song, Jae Yeal Nam, and Yeong Ho Ha, "Scene Change Adaptive Bit Rate Control Using Local Variance," *The Journal of the Korean*

*Institute of Communication Sciences*, vol.22, no.4, pp. 412-424, Apr. 1997.

- [146] Young Sik Park, Eui Yoon Chung, Kun Woen Song, Gi Seok Kim, and Yeong Ho Ha, "Regional Hierarchical Segmentation and Contour Simplification Method for Very Low Bit Rate Coding in Mobile Communication," *The Journal of the Korean Institute of Communication Sciences*, vol.22, no.3, pp. 432-443, Mar. 1997.
- [147] Yang Woo Park, Eung Joo Lee, Kyeong Man Kim, Tae Uk Uam, and Yeong Ho Ha, "Color Image Quantization Considering Distortion Measure of Local Region Block on RGB Space," *The Journal of the Korean Institute of Communication Sciences*, vol.21, no.4, pp. 848-854, Apr. 1996.
- [148] Kyeong Man Kim, Eung Joo Lee, Yang Woo Park, Chae Soo Lee, and Yeong Ho Ha, "Color Image Quantization Using Weighted Distortion of HVS Color Activity," *The Journal of the Korea Institute of Telematics and Electronics*, vol.33, no.4, pp. 731-740, Apr. 1996.
- [149] Chae Soo Lee, Kyeong Man Kim, Eung Joo Lee, Yang Woo Park, and Yeong Ho Ha, "Nonlinear Quantization and Modified Dot Diffusion for Color Printing," *The Journal of the Korea Institute of Telematics and Electronics*, vol.33, no.3, pp. 88-95, Mar. 1996.
- [150] Kyeong Hoon Do, Yong Suk Kim, and Yeong Ho Ha, "Relaxational Stereo Matching Using Adaptive Support Between Disparities," *The Journal of the Korea Institute of Telematics and Electronics*, vol.33, no.3, pp. 69-77, Mar. 1996.
- [151] Eung Joo Lee, In Gab Jeong, Yang Woo Park, Kwang Chun Lee, and Yeong Ho Ha, "The Color Enhancement of TV Picture by the Color Measurement of Illumination," *The Journal of the Korean Institute of Communication Sciences*, vol.21, no.1, pp. 467-478, Jan. 1996.
- [152] Kun Woen Song, Gi Seok Kim, Kyeong Hoon Do, and Yeong Ho Ha, "Classification of Scaled Texture Images Using Normalized Pattern Spectrum Based on mathematical Morphology," *The Journal of the Korea Institute of Telematics and Electronics*, vol.33, no.1, pp. 116-127, Jan. 1996.
- [153] Kyu Phil Han, Yong Suk Kim, Kyeong Hoon Do, and Yeong Ho Ha, "Stereo Matching Based on Edge and Area Information," *The Journal of the Korea Institute of Telematics and Electronics*, vol.32, no.12, pp. 47-58, Dec. 1995.
- [154] Jin Soo Choi and Yeong Ho Ha, "Fractal Image Compression Using Block Classification in Frequency Domain," *The Journal of the Korean Institute of Communication Sciences*, vol.20, no.4, pp. 225-237, Apr. 1995.
- [155] Jae Kwon Eem, Hyun Duk Sin, Hyun Ho Jeong, and Yeong Ho Ha, "Evaluation of Characteristic Spectra of Munsell Colors," *KITE Journal of Electronics Engineering*, vol.6, no.1, pp. 43-49, Mar. 1995.
- [156] Wang Guk Lee, Yong Suk Kim, Kyeong Hoon Do, and Yeong Ho Ha, "A Stereo Matching by the Iterative Relaxation Using the Consensus of Matching Possibility," *The Journal of the Korea Institute of Telematics and Electronics*, vol.32, no.1, pp. 39-49, Jan. 1995.
- [157] Gi Seok Kim, Kyeong Hoon Do, Kap Hyun Kwon, and Yeong Ho Ha, "Texture Classification Based on Morphological Subband Decomposition," *The Journal of the Korea Institute of Telematics and Electronics*, vol.31, no.12, pp.51-58, Dec. 1994.
- [158] Kyeong Hoon Do, Ki Ho Hyun, Young Bok Byun, Ki Youn Joe, and Yeong Ho Ha, "High Impedance Fault Detection Using Back-Propagation Neural Network," *The Journal of the Korean Institute of Electrical Engineers*, vol.43, no.11, pp.1826-1834, Nov. 1994.
- [159] Ick Hwan Kim, Jin Soo Choi, Kwang Chun Lee, Kil Houm Park, and Yeong Ho Ha, "Adaptive Coding Algorithm Using Quantizer Vector Codebook in HDTV," *The Journal of the Korea Institute of Telematics and Electronics*, vol.31, no.10, pp.130-139, Oct. 1994.
- [160] In Gab Jeong, Ki Ho Hyun, Jun Jae Lee, and Yeong Ho Ha, "Segmentation of Range Images Using Hierarchical Structure of Neural Networks," *The Journal of the Korea Institute of Telematics and Electronics*, vol.31, no.10, pp.123-129, Oct. 1994.
- [161] Yong Suk Kim, Jun Jae Lee, and Yeong Ho Ha, "A Hierarchical Stereo Matching Algorithm Using Wavelet Representation," *The Journal of the Korea Institute of Telematics and Electronics*, vol.31, no.8, pp.74-86, Aug. 1994.

- [162] Young Sik Park, Jun Jae Lee, Eung Joo Lee, and Yeong Ho Ha, "Car Noise Cancellation by Using Spectral Subtraction Method Based on a New Speech/nonspeech Classification Function," *The Journal of the Korean Institute of Communication Sciences*, vol.19, no.6, pp. 994-1003, Jun.1994.
- [163] Yong Ha Kim, Jin Soo Choi, Kwang Chun Lee, and Yeong Ho Ha, "HDTV Image Compression Algorithm Using Leak Factor and Human Visual System," *The Journal of the Korean Institute of Communication Sciences*, vol.19, no.5, pp. 822-832, May 1994.
- [164] Jae Chang Shim, Jun Jae Lee, and Yeong Ho Ha, "Connected-component Labeling Using Contour Following," *The Journal of the Korea Institute of Telematics and Electronics*, vol.31, no.5, pp.95-107, May 1994.
- [165] Jae Chang Shim, Gi Seok Kim, Jun Jae Lee, Ruud M. Bolle, and Yeong Ho Ha, "New Texture Recognition Method Using Local Weighting Averaged texture Units" *The Journal of the Korea Institute of Telematics and Electronics*, vol.31, no.3, pp.129-137, Apr. 1994.
- [166] Wang Guk Lee, Jeong Yeop Kim, Jun Jae Lee, and Yeong Ho Ha, "Back-propagation Algorithm with a zero compensated Sigmoid-prime function," *The Journal of the Korea Institute of Telematics and Electronics*, vol.31, no.3, pp.115-122, Mar. 1994.
- [167] Jae Hwui Bae, Jin Soo Choi, Jae Chang Shim, and Yeong Ho Ha, "Image Restoration Using Directional Multistage Morphological Filter," *The Journal of the Korea Institute of Telematics and Electronics*, vol.30, no.9, pp.76-83, Sep. 1993.
- [168] Jae Chang Shim, Jin Soo Choi, Eung Joo Lee, and Yeong Ho Ha, "Adaptive Directional-Median Averaging Hybrid Filter," *KITE Journal of Electronics Engineering*, vol. 4, no.1, pp. 52-56, Jul. 1993.
- [169] Kyeong Hoon Do, Jun Jae Lee, Seok Je Cho, Wang Guk Lee, and Yeong Ho Ha, "Stereo Matching with Color Information Using Neural Network Model," *The Journal of the Korea Information Science Society*, vol.20, no.7, pp. 1029-1038, Jul. 1993.
- [170] Kyeong Hoon Do, Jun Jae Lee, Seok Je Cho, Wang Guk Lee, and Yeong Ho Ha, "Stereo Matching Using Analog Neural Network," *The Journal of the Korea Institute of Telematics and Electronics*, vol.30, no.6, pp. 59-66, Jun. 1993.
- [171] Sung Ho Bae, Jeong Yeop Kim, Kap Hyeon Kwon, and Yeong Ho Ha, "Color Image Enhancement Based on Color Constancy," *The Journal of the Korea Institute of Telematics and Electronics*, vol.30, no.5, pp.103-108, May 1993.
- [172] Seok Hyun Kim, Yeong Ho Ha, and Soo Joong Kim, "DCT Classifier Based on HVS and Pyramidal Image Coding Using VQ," *The Journal of the Korean Institute of Communication Sciences*, vol.18, no.1, pp.47-56, Jan. 1993.
- [173] Seung Kyu Park, Kyeong Hoon Do, Jun Jae Lee, and Yeong Ho Ha, "Hopfield Neural Network Modeling of Cooperative Algorithm for Stereo Matching," *The Journal of the Korea Institute of Telematics and Electronics*, vol.29, no.12, pp.124-133, Dec. 1992.
- [174] Jeong Yeop Kim, Jae Chang Shim, Soon Ja Kim, and Yeong Ho Ha, "Pseudo-linear HIS-based Coordinate System for Color Image Enhancement," *The Journal of the Korea Institute of Telematics and Electronics*, vol.29, no.9, pp.59-67, Sep.1992.
- [175] Jae Chang Shim, Keum Sook Ha, Ki Ho Hyun, and Yeong Ho Ha, "Filling and Labeling Algorithm Using Directional Information of Chain-code," *The Journal of the Korea Institute of Telematics and Electronics*, vol.29, no.9, pp.50-58, Sep. 1992.
- [176] In Gab Jeong, Ki Ho Hyun, Jun Jae Lee, and Yeong Ho Ha, "Range Data Segmentation and Classification Using Eigenvalues of Surface Function and Neural Network," *The Journal of the Korea Institute of Telematics and Electronics*, vol.29, no.7, pp.70-78, Jul. 1992.
- [177] Kap Hyeon Kwon, Yeong Ho Ha, and Soo Joong Kim, "Dye Leakage Measurement in Time Series Fluorescein Ocular Fundus Photographs," *The Journal of the Korea Society of Medical & Biological Engineering*, vol. 12, no. 4, pp.295-302, Apr. 1991.
- [178] Byeong Kil Lee, Soon Ja Kim, and Yeong Ho Ha, "Space-Variant B-Spline Functions for Image Interpolation," *The Journal of the Korean Institute of Electrical Engineers*, vol.40, no.4, pp.394-401,

Apr. 1991.

- [179] Jun Jae Lee, Seok Je Cho, and Yeong Ho Ha, "Neural Network Modeling of Optimizing Energy Function for Stereo Matching," *The Journal of the Korea Institute of Telematics and Electronics*, vol.28, no.1, pp.66-73, Jan. 1991.
- [180] Ki Ho Hyun, Kwang Ho Lee, Byung Kon Hwang, Seok Je Cho, and Yeong Ho Ha, "Segmentation and Classification of Range Data Using Phase Information of Gabor Filter," *The Journal of the Korea Institute of Telematics and Electronics*, vol.27, no.8, pp.129-137, Aug. 1990.
- [181] Kyeong Soo Kim, Soon Ja Kim, and Yeong Ho Ha, "Edge-Enhanced B-Splines for Image Interpolation," *KITE Journal of Electronics Engineering*, vol.1, no.1, pp.49-56, Jun. 1990.
- [182] Byung Kon Hwang, Seok Je Cho, Yeong Ho Ha, and Soo Joong Kim, "Segmentation and Classification of 3-D Object from Range Information," *The Journal of the Korea Institute of Telematics and Electronics*, vol.27, no.1, pp.120-129, Jan. 1990.
- [183] Jae Chang Shim, Seok Je Cho, and Yeong Ho Ha, "A New Interior-Filling Algorithm Based on Binary Boundary Coding," *The Journal of the Korea Institute of Telematics and Electronics*, vol.26, no.11, pp.238-242, Nov. 1989.
- [184] Jeong Woo Kim, Yang Hoi Doh, Yeong Ho Ha, and Soo Joong Kim, "Korean Alphabet Recognition with Tree Using NRF-SDF," *The Journal of the Korea Institute of Telematics and Electronics*, vol.26, no.9, pp.42-49, Jul. 1989.
- [185] Yang Hoi Doh, Jeong Woo Kim, Shin Il Jung, Yeong Ho Ha, and Soo Joong Kim, "Modified Ternary Phase-Only SDF Filter for Korean Character Recognition," *The Journal of the Korea Institute of Telematics and Electronics*, vol.26, no.8, pp.135-142, Aug. 1989.
- [186] Sang Oon Yoon, Seok Je Cho, and Yeong Ho Ha, "An Enhanced Optical Flow Calculation Using Scalar Edges," *The Journal of the Korea Institute of Telematics and Electronics*, vol.26, no.7, pp.132-139, Jul. 1989.
- [187] Chang Rim Koh, Yeong Ho Ha, and Soo Joong Kim, "Analysis and Representation of the Feature Region on Ocular Fundus Fluorescein Angiogram," *The Journal of the Korea Institute of Telematics and Electronics*, vol.26, no.5, pp.92-98, May 1989.
- [188] Hyun Sik Ahn, Seok Je Cho, Chul Dong Lee, and Yeong Ho Ha, "Global Coordinate Extraction of IC Chip Pattern Using Form Matching," *The Journal of the Korea Institute of Telematics and Electronics*, vol.26, no.4, pp.120-126, Apr. 1989.
- [189] Byung Moon Jung, Kil Houm Park, and Yeong Ho Ha, "Image Reconstruction from Incomplete Data Using a New Data Acquisition Method," *The Journal of the Korea Institute of Telematics and Electronics*, vol.25, no.12, pp. 57-63, Dec. 1988.
- [190] Seok Je Cho, Kwang Ho Lee, and Yeong Ho Ha, "3-D Position and Depth Measurement by New Feature Extraction Method from Stereo Image," *The Journal of the Korea Institute of Telematics and Electronics*, vol.25, no.11, pp. 215-222, Nov. 1988.
- [191] Hark Sang Kim, Young Mo Kim, Kil Houm Park, Kwang Ho Lee, and Yeong Ho Ha, "Edge Extraction Using Central Moments," *The Journal of the Korea Institute of Telematics and Electronics*, vol.25, no.10, pp. 104-111, Oct. 1988.
- [192] Jin Ho Cho, Yeong Ho Ha, and Kuhn Il Lee, "A Gaussian Beam Light Distribution Model of the Biological Tissue," *The Journal of the Korea Institute of Telematics and Electronics*, vol.25, no.6, pp. 64-72, Jun. 1988.
- [193] Yeong Ho Ha, Won Ho Kim, and Soo Joong Kim, "Modified Raised-Cosine Interpolation and Application to Image Processing," *The Journal of the Korea Institute of Telematics and Electronics*, vol.25, no.4, pp. 98-104, Apr. 1988.
- [194] Yeong Ho Ha and Young Mo Kim, "Modified Raised-cosine Window and Comparison With Standard Windows," *The Journal of the Korean Institute of Communication Sciences*, vol.12, no.6, pp. 607-611, Jun. 1995.
- [195] Chang Rim Koh, Yeong Ho Ha, and Soo Joong Kim, "Extraction and Shape Description of Feature Region on Ocular Fundus Fluorescein Angiogram," *The Journal of the Korea Society of Medical*

*Biological Engineering*, vol. 8, no. 1, pp.81-86, Jun. 1987.

- [196] Yoon Seok Nam, Yeong Ho Ha, and Soo Joong Kim, "Image Segmentation Using Bi-directional Distribution Functions of Histogram," *The Journal of the Korea Institute of Telematics and Electronics*, vol.24, no.6, pp. 91-95, Jun. 1987.
- [197] Chang Rim Koh, Yeong Ho Ha, Jae Keun Hong, and Soo Joong Kim, "Local Feature Detection on the Ocular Fundus Fluorescein Angiogram Using Relaxation Process," *The Journal of the Korea Institute of Telematics and Electronics (KITE)*, vol.24, no.5, pp. 124-130, May 1987.
- [198] Jin Ho Cho, Yeong Ho Ha, and Kuhn Il Lee, "Optical Transmission Characteristics of the Breast Tissue in the Range of Near IR," *The Journal of the Korea Society of Medical & Biological Engineering*, vol. 7, no. 2, pp.159-168, Feb.1986.

### **International Conferences**

- [1] Shibudas Kattakkalil Subhashdas, Ji Hoon Yoo, Bong Seok Choi, and Yeong Ho Ha, "Combinational Color Constancy Method using Dynamic Weights," Twenty-fifth Color Imaging Conference: Color Science and Engineering, Lillehammer, Norway, pp. 245-250, Sep. 2017.
- [2] Shibudas Kattakkalil Subhashdas, Ji Hoon Yoo, and Yeong Ho Ha, "Illuminant Chromaticity Estimation via Optimization of RGB Channel Standard Deviation," Twenty-fourth Color Imaging Conference: Color Science and Engineering, San Diego, USA, pp. 180-186, Nov. 2016.
- [3] Ji Hoon Yoo, Wang Jun Kyung, Shibudas Kattakkalil Subhashdas, and Yeong Ho Ha, "Color Constancy Algorithm Using Weighted Multi-scale Correction Coefficients," Twenty-fourth Color Imaging Conference: Color Science and Engineering, San Diego, USA, pp. 174-179, Nov. 2016.
- [4] Wang Jun Kyung, Ji Hoon Yoo, Shibudas Kattakkalil Subhashdas, and Yeong Ho Ha, "Distinct Contrast in CIECAM02 for Mobile Display," Twenty-third Color Imaging Conference: Color Science and Engineering, Darmstadt, Germany, pp. 70-74, Oct. 2015.
- [5] Ho Gun Ha, Shibudas Kattakkalil Subhashdas, Bong Seok Choi, and Yeong Ho Ha, "Hierarchical Integrated Color Matching in a Stereoscopic Image based on Image Decomposition," Twenty-third Color Imaging Conference: Color Science and Engineering, Darmstadt, Germany, pp. 29-35, Oct. 2015.
- [6] Dae Chul Kim, Bong Seok Choi, Ji Hoon Yoo, and Yeong Ho Ha, "Illumination Estimation Using Nonnegative Matrix Factorization and Dominant Chromaticity Analysis," IEEE International Conference on Consumer Electronics 2015, Berlin, Germany, pp. 248-251, Sep. 2015.
- [7] Ji Heon Lee, Ji Hoon Yoo, Jung Min Sung, and Yeong Ho Ha, "Illumination Estimation Based on
- [8] Estimation of Dominant Chromaticity in Nonnegative Matrix Factorization with Sparseness Constraints," Electronic Imaging 2015, San Francisco, California, U.S.A., Feb. 2015.
- [9] Shibudas Kattakkalil Subhashdas, Bong Seok Choi, Ji Hoon Yoo, and Yeong Ho Ha, "Color Image Enhancement Based on Particle Swarm Optimization with Gaussian Mixture," Electronic Imaging 2015, San Francisco, California, U.S.A., Feb. 2015.
- [10] Dae Chul Kim, Bong Seok Choi, Wang Jun Kyung, Dong Wook Kang, Kyung Mo Kim, and Yeong Ho Ha, "Enhancement of Visibility by Adjusting Brightness Based on App Image Categorization in Mobile Device Enhancement of Visibility by Adjusting Brightness Based on App Image Categorization in Mobile Device," Twenty-second Color Imaging Conference: Color Science and Engineering, Boston, MA, U.S.A., pp. 125 - 130, Nov. 2014.
- [11] Ho Gun Ha, Wang-Jun Kyung, Ji Hoon Yoo, and Yeong Ho Ha, "Simultaneous Color Matching in Stereoscopic Images Based on Image Decomposition," IEEE International Conference on Consumer Electronics, Berlin, Germany, pp. 149 - 152, Sep. 2014.
- [12] Jung Min Sung, Dae Chul Kim, Bong Seok Choi, and Yeong Ho Ha, "Image Thresholding Using Standard Deviation," *Electronic Imaging 2014*, San Francisco, California, USA, pp. 90240R-1 -

90240R-7, Feb. 2014

- [13] Dae Chul Kim, Wang Jun Kyung, Bong Seok Choi, and Yeong Ho Ha, "Moire Reduction Using Inflection Point in Frequency Domain," *Electronic Imaging 2014*, San Francisco, California, USA, pp. 90150J-1 – 90150J-7, Feb. 2014
- [14] Bong Seok Choi, Dae Chul Kim, Wang Jun Kyung, and Yeong Ho Ha, " Multi-spectral Flash Imaging under Low-light Condition using Optimization with Weight Map," *International Conference on Computer Vision Theory and Applications*, Lisbon, Portugal, pp. 34 - 39, Jan. 2014
- [15] Ji Hoon Yoo, Ho Gun Ha, Wang Jun Kyung, and Yeong Ho Ha, "Accurate Wiener Estimation by Constructing a Similar Training Set based on Spectral Correlation," *International Conference on Signal-Image Technology & Internet-Based Systems*, Kyoto, Japan, pp. 430 - 433, Dec. 2013
- [16] Ran Shu, Ho Gun Ha, Dae Chul Kim, and Yeong Ho Ha, "Integrated Color Matching Using 3D-distance for Local Region Similarity, " *Twenty-first Color Imaging Conference: Color Science and Engineering*, Albuquerque, New Mexico, U.S.A., pp. 221 - 226, Nov. 2013.
- [17] Bong Seok Choi, Dae Chul Kim, Oh Seol Kwon, and Yeong Ho Ha, "Acquisition of Multi-Spectral Flash Image using Optimization Method via Weight map," *Electronic Imaging 2013*, Burlingame, California, U.S.A., pp. 8652 – 29, Feb. 2013.
- [18] Ji Hoon Yoo, Wang Jun Kyung, Ho Gun Ha, and Yeong Ho Ha, "Estimation of Reflectance based on Properties of Selective Spectrum with Adaptive Wiener Estimation," *Electronic Imaging 2013*, Burlingame, California, U.S.A., pp. 8652 – 13, Feb. 2013.
- [19] Bong Seok Choi, Dae Chul Kim, and Yeong Ho Ha, "Multi-spectral Flash Imaging using Weight Map," *FCV 2013 Proceedings of The 19th Korea-Japan Joint Workshop on Frontiers of Computer Vision*, Incheon, Korea, pp. 272 – 275, Jan. 2013.
- [20] Dae Chul Kim, Wang Jun Kyung, and Yeong Ho Ha, "Selective Skin Tone Reproduction based on Multiple Preferred Skin Colors," *Color and Imaging Conference Final Program and Proceedings*, Los Angeles, California, pp. 149 – 154, Nov. 2012.
- [21] Wang Jun Kyung, Dae Chul Kim, Ho Gun Ha, and Yeong Ho Ha, "Color Enhancement for Faded Images based on Multi-scale Gray World Algorithm," *IEEE International Symposium on Consumer Electronics*, Harrisburg, U.S.A., pp. 1569574601-10 – 1569574601-13, Jun. 2012.
- [22] Dae Chul Kim, Wang Jun Kyung, Ho Gun Ha, and Yeong Ho Ha, "Selective Skin Tone Reproduction using Preferred Skin Colors," *IEEE International Symposium on Consumer Electronics*, Harrisburg, U.S.A., pp. 1569574507-8 – 1569574507-11, Jun. 2012.
- [23] Wang Jun Kyung, Dae Chul Kim, Massimo Fierro, and Yeong Ho Ha, "Color Correction of Faded Image using Multi-scale Gray World Algorithm," *CGIV 2012 Sixth European Conference on Colour in Graphics, Imaging, and Vision*, Amsterdam, Netherlands, pp. 331 – 336, May 2012.
- [24] Massimo Fierro, Wang Jun Kyung, and Yeong Ho Ha, "Dual-tree Complex Wavelet Transform based denoising for Random Spray Image Enhancement Methods," *CGIV 2012 Sixth European Conference on Colour in Graphics, Imaging, and Vision*, Amsterdam, Netherlands, pp. 194 – 199, May 2012.
- [25] In Young Song, Ho Gun Ha, Wang Jun Kyung, and Yeong Ho Ha, "Spatial Gamut Mapping for Preserving the Details of an Image," *Electronic Imaging 2012*, Burlingame, California, U.S.A, pp. 829209-1 – 829209-8, Feb. 2012.
- [26] Il Su Park, Ho Gun Ha, Dae Chul Kim, and Yeong Ho Ha, "Hue-shift Model for DLP Projector with the White Peacking Function, " *Electronic Imaging 2012*, Burlingame, California, U.S.A, pp. 829214-1 – 829217-8, Feb. 2012.
- [27] Tae Hyoung Lee, Ho Gun Ha, and Yeong Ho Ha, "Reconstruction of Super Resolution High Dynamic Range Image from Multiple-Exposure Images," *Nineteenth Color Imaging Conference: Color Science and Engineering*, San Jose, California, U.S.A., pp. 195 – 200, Nov. 2011.
- [28] Dae Chul Kim, Tae Hyoung Lee, and Yeong Ho Ha, "Brightness Compensation for Anaglyph Images," *International Meeting on Information Display*, Seoul, Korea, pp. 356 – 357, Oct. 2011.
- [29] Dae Chul Kim, Wang Jun Kyung, Kyung Man, and Yeong Ho Ha, "Skin Tone Reproduction based

- on Multiple Preferred Skin Colors," *IEEE International Conference on Consumer Electronics*, Berlin, Germany, pp. 110 – 113, Sep. 2011.
- [30] Ho Gun Ha, Dae Chul Kim, In Su Jang, and Yeong Ho Ha, "Local Color Transfer using Modified Color Influence Map with Color Category," *IEEE International Conference on Consumer Electronics*, Berlin, Germany, pp. 196 – 199, Sep. 2011.
- [31] Wang Jun Kyung, Kyung Man Kim, Dae Chul Kim, and Yeong Ho Ha, "Color Correction for Faded Image using Classification in LCyCrg Color Space," *IEEE International Conference on Consumer Electronics*, Berlin, Germany, pp. 191 – 195, Sep. 2011.
- [32] Wang Jun Kyung, Dae Chul Kim, and Yeong Ho Ha, "Real-time Multi-scale Retinex to Enhance Night Scene of Vehicular Camera," *FCV 2011 Proceedings of The 17th Korea-Japan Joint Workshop on Frontiers of Computer Vision*, Ulsan, Korea, Feb. 2011.
- [33] Dae Chul Kim, Tae Hyoung Lee, Myong Hui Choi, and Yeong Ho Ha, "Color Correction for Projected Image on Colored-screen Based on Camera," *Electronic Imaging 2011*, San Francisco, California, U.S.A., pp. 786606-1 – 786606-8, Jan. 2011.
- [34] Tae Hyoung Lee, Wang Jun Kyung, Chul Hee Lee, and Yeong Ho Ha, "Estimation of Low Dynamic Range Images from Single Bayer Image using Exposure Look-up Table for High Dynamic Range Image," *Electronic Imaging 2011*, San Francisco, California, U.S.A., pp. 78660B-1 – 78660B-10, Jan. 2011.
- [35] Tae Hyoung Lee, Wang Jun Kyung, In Su Jang, and Yeong Ho Ha, "Local Contrast Enhancement Based on Adaptive Multi-Scaled Retinex using Intensity Distribution of Input Image," *Eighteenth Color Imaging Conference: Color Science and Engineering*, San Antonio, Texas, U.S.A., pp. 365-370, Nov. 2010.
- [36] In Su Jang, Tae Hyoung Lee, Ho Gun Ha, and Yeong Ho Ha, "Adaptive Color Enhancement Based on Multi-Scaled Retinex Using Local Contrast of the Input Image," *International Symposium on Optomechatronic Technologies 2010*, Toronto, Canada, Oct. 2010.
- [37] Ho Gun Ha, Wang Jun Kyung, and Yeong Ho Ha, "Modifying a Local Concavity of Gamut Boundary in Segment Maxima," *International Meeting on Information Display 2010*, Seoul, Korea, pp. 392-393, Oct. 2010.
- [38] Tae Hyung Lee and Yeong Ho Ha, "Estimation of Low Dynamic Range Images from a Single Image for High Dynamic Range Imaging Based on Exposure Look-up Table," *International Meeting on Information Display 2010*, Seoul, Korea, pp. 432-433, Oct. 2010.
- [39] Massimo Fierro, Tae Hyung Lee, and Yeong Ho Ha, "RAW Image Files: The Way to HDR Images from a Single Exposure," *CGIV 2010 The Fifth European Conference on Colour in Graphics, Imaging, and Vision*, Joensuu, Finland, pp. 452-458, Jun. 2010.
- [40] Wang Jun Kyung, Ho Gun Ha, Cheol Hee Lee, and Yeong Ho Ha, "Real-time Enhancing Method for Night Scene of Vehicular Camera based on Multi-scale Retinex," *ICIS 2010 The 31st International Congress on Imaging Science*, Beijing, China, pp. 46-49, May 2010.
- [41] Dae Chul Kim, In Su Jang, Tae Hyoung Lee, and Yeong Ho Ha, "Color Correction for Projected Image on Colored Screen Using Correction Matrix Based on Camera," *ICIS 2010 The 31st International Congress on Imaging Science*, Beijing, China, pp. 201-204, May 2010.
- [42] Ho Gun Ha, In Su Jang, and Yeong Ho Ha, "Subpixel Shift Estimation Method for the Registration of Noisy Images Using a Wiener Filtered Local Region," *FCV 2010 Proceedings of The 16th Korea-Japan Joint Workshop on Frontiers of Computer Vision*, Hiroshima, Japan, pp. 266-270, Feb. 2010.
- [43] Tae Hyung Lee and Yeong Ho Ha, "Characteristic of Color Gamut Related with MPEG2 Compression," *Electronic Imaging 2010*, San Jose, California U.S.A., Jan. 2010.
- [44] Dae Chul Kim, In Su Jang, Chang Hwan Son, Kyung Man Kim, and Yeong Ho Ha, "Adaptive Color Reproduction Method to Various User's Monitor Environment in Color Printer," *Electronic Imaging 2010*, San Jose, California U.S.A., Jan. 2010.
- [45] Wang Jun Kyung, Tae Hyoung Lee, In Su Jang, Cheol Hee Lee, and Yeong Ho Ha, "Improved

- Color Reproduction by Hue Preservation in Integrated Multi-scale Retinex," *Seventeenth Color Imaging Conference: Color Science and Engineering*, Albuquerque, New Mexico, U.S.A., pp. 248-253, Nov. 2009.
- [46] Yeong Ho Ha, "Image and Display Quality Evaluation," *International Meeting on Information Display 2009*, Seoul, Korea, pp. 1224-1227, Oct. 2009.
- [47] Tae Hyung Lee and Yeong Ho Ha, "On the Relationship of Color Image Compression and Gamut: MPEG2," *International Meeting on Information Display 2009*, Seoul, Korea, pp. 1232-1225, Oct. 2009.
- [48] Wang Jun Kyung, Tae Hyung Lee, Cheol Hee Lee, and Yeong Ho Ha, "Hue Preserved Multi-scale Retinex to Improve Color Reproduction," *International Meeting on Information Display 2009*, Seoul, Korea, pp. 1546-1549, Oct. 2009.
- [49] Massimo Fierro, Ho Gun Ha, and Yeong Ho Ha, "An Automatic Color Correction Method Inspired by the Retinex and Opponent Colors Theories," *International Symposium on Optomechatronic Technologies 2009*, Istanbul, Turkey, pp. 316-321, Sep. 2009.
- [50] Tae Hyoung Lee, Wang Jun Kyung, Cheol Hee Lee, Hee Chan Park, and Yeong Ho Ha, "Auto Gain Control Based on Look Up Table from Scene-Luminance Curve in Mobile Phone Camera," *European Signal Processing Conference 2009*, Glasgow, Scotland, pp. 273-277, Aug. 2009.
- [51] Wang Jun Kyung, Tae Hyoung Lee, Cheol Hee Lee, and Yeong Ho Ha, "Improved Color Reproduction Based on CIELAB Color Space in Integrated Multi-scale Retinex," *Electronic Imaging 2009*, San Jose, California U.S.A., pp. 724105-1 - 724105-10, Jan. 2009.
- [52] Ho Gun Ha, In Su Jang, Kyung Woo Ko, and Yeong Ho Ha, "Robust Subpixel Shift Estimation Using Iterative Phase Correlation of a Local Region," *Electronic Imaging 2009*, San Jose, California U.S.A., pp. 724115-1 - 724115-9, Jan. 2009.
- [53] Tae Yong Park, Kyung Woo Ko, and Yeong Ho Ha, "Analysis of Relationship between Image Compression and Gamut Variation," *International Workshop on Advanced Image Technology 2009*, Seoul, Korea, Jan. 2009.
- [54] In Su Jang, Kee Hyon Park, and Yeong Ho Ha, "Color Correction Using Chromaticity of Highlight Region in Multi-Scaled Retinex," *International Workshop on Advanced Image Technology 2009*, Seoul, Korea, Jan. 2009.
- [55] Kyung Woo Ko, Kee Hyon Park, and Yeong Ho Ha, "Evaluation of Camera Performance Using ISO-based Criteria," *International Workshop on Advanced Image Technology 2009*, Seoul, Korea, Jan. 2009.
- [56] Tea Yong Park, Kyung Woo Ko, and Yeong Ho Ha, "On the Relationship of Color Image Compression and Gamut: JPEG and JPEG2000," *Sixteenth Color Imaging Conference: Color Science and Engineering*, Portland, Oregon, U.S.A., pp. 44-49, Nov. 2008.
- [57] In Su Jang, Kee Hyon Park, and Yeong Ho Ha, "Modified Multi-scaled Retinex Using Chromaticity of Highlight Region For Correcting Color Distortion," *Sixteenth Color Imaging Conference: Color Science and Engineering*, Portland, Oregon, U.S.A., pp. 50-55, Nov. 2008.
- [58] Kyung Woo Ko, Kee Hyon Park, and Yeong Ho Ha, "Evaluation of Vehicular Camera Performance through ISO-based Image Quality Quantification," *Sixteenth Color Imaging Conference: Color Science and Engineering*, Portland, Oregon, U.S.A., pp. 238-242, Nov. 2008.
- [59] Yeong Ho Ha, Chang Hwan Son, and In Su Jang, "Color Reproduction Using Multi-primaries/colorants (Invited)," *Pan-Pacific Imaging Conference '08*, Tokyo, Japan, pp. 222-225, Jun. 2008.
- [60] Kee Hyon Park, In Su Jang, Tae Hyoung Lee, and Yeong Ho Ha, "Time-stable RGB LED Backlighting Control Using Time-varying Transform Matrix," *CGIV 2008 The Fourth European Conference on Colour in Graphics, Imaging, and Vision*, Terrassa – Barcelona, Spain, pp. 336-340, Jun. 2008.
- [61] Chang Hwan Son and Yeong Ho Ha, "Color correction of projected image on color screen for mobile beam-projector," *Electronic Imaging 2008*, San Jose, California U.S.A., pp. 68070F-1 -



68070F-12, Jan. 2008.

- [62] Dong Chang Lee, Oh Seol Kwon, Kyung Woo Ko, and Yeong Ho Ha, "Image mosaicking using local descriptor based on color invariants," *Electronic Imaging 2008*, San Jose, California U.S.A., pp. 681414-1 – 681414-9, Jan. 2008.
- [63] Dae Geun Park, Kee Hyon Park, Tae Hyung Lee, and Yeong Ho Ha, "Efficient HDR image acquisition using estimation of scenic dynamic range in camera images with different exposures," *Electronic Imaging 2008*, San Jose, California U.S.A., pp. 680705-1 - 680705-12, Jan. 2008.
- [64] Oh Seol Kwon, In Su Jang, Tae Yong Park, and Yeong Ho Ha, "Color Reproduction Considering the Average Picture Level and Flare Effect in PDP Displays," *Fifteenth Color Imaging Conference: Color Science and Engineering*, Albuquerque, New Mexico, U.S.A., pp. 163-168, Nov. 2007.
- [65] Joong Hyun Kim, Chang Hwan Son, Tae Yong Park, and Yeong Ho Ha, "Photo-inkjet Printing Method Based on the Limited Total Amount and Dot-visibility of Six-colorant," *Fifteenth Color Imaging Conference: Color Science and Engineering*, Albuquerque, New Mexico, U.S.A., pp. 255-260, Nov. 2007.
- [66] Yeong Ho Ha and Cheol Hee Lee, "Overview of Printing Industry and Digital Printing Technology in Korea (Invited)," *International Graphic Arts Show*, Tokyo, Japan, Sep. 2007.
- [67] Tae Hyung Lee, Myong Young Lee, Kee Hyon Park, and Yeong Ho Ha, "Hue-Shift Modeling and Correction Method for High-Luminance Display," *IEEE International Conference on Image Processing*, San Antonio, Texas, U.S.A., pp. 465-468, Sep. 2007.
- [68] Kyung Woo Ko, Oh Seol Kwon, Chang Hwan Son, and Yeong Ho Ha, "Color Recovery from Gray Image Based on Analysis of Wavelet Packet Sub-bands," *Electronic Imaging 2007*, San Jose, CA, U.S.A., vol. 6493, pp. 64930Z-1 – 64930Z-8, Jan. 2007.
- [69] Tae Hyung Lee, Myong Young Lee, Kee Hyon Park, and Yeong Ho Ha, "Modeling for Hue Shift Effect of Human Visual System on High Luminance Display," *Electronic Imaging 2007*, San Jose, CA, U.S.A., vol. 6493, pp. 64930A-1 – 64930A-9, Jan. 2007.
- [70] Myong Young Lee, Cheol Hee Lee, and Yeong Ho Ha, "Physical based Photon Mapping Technique for LED Back Light Lighting Simulator," *Fourteenth Color Imaging Conference: Color science and Engineering*, Scottsdale, AZ, U.S.A., pp. 286-290, Nov. 2006.
- [71] In Su Jang, Chang Hwan Son, Tae Yong Park, Kyung Woo Ko, and Yeong Ho Ha, "Hi-fi Printer Characterization Method Using Color Correlation for Gamut Extension," *IEEE International Conference on Image Processing*, Atlanta, GA, U.S.A., pp. 1517-1520, Oct. 2006.
- [72] Jong Man Kim, Chang Hwan Son, Cheol Hee Lee, Myong Young Lee, and Yeong Ho Ha, "Illuminant Adaptive Color Reproduction Based on Lightness Adaptation and Flare for Mobile Phone," *IEEE International Conference on Image Processing*, Atlanta, GA, U.S.A., pp. 1513-1516, Oct. 2006.
- [73] Chang Hwan Son, Tae Yong Park, Cheol Hee Lee, and Yeong Ho Ha, "Implementation of a Real-time Color Matching between Mobile Camera and Mobile LCD based on 16-bit LUT Design," *SPIE Optics East 2006*, Boston, MA, U.S.A., vol. 6392, pp. 63920R-1 – 63920R-12, Oct. 2006.
- [74] Kwang Min Jeong, Joon Jae Lee, and Yeong Ho Ha, "Video Sequence Matching Using Singular Value Decomposition," *International Conference on Image Analysis and Recognition*, Povo de Varzim, Portugal, Sep. 2006.
- [75] Tae Yong Park, Myong Young Lee, Chang Hwan Son, and Yeong Ho Ha, "Multitoning Method Based on Threshold Modulation using MJBNM for Banding Artifact Reduction," *CGIV 2006 The Second European Conference on Colour in Graphics, Imaging, and Vision*, Leeds, United Kingdom, pp. 318-321, Jun. 2006.
- [76] Kee Hyon Park, Myong Young Lee, Cheol Hee Lee, and Yeong Ho Ha, "Display Characterization for Mobile LCD Based on Modeling Electro-Optical Transfer Functions for Channels and Inter-Channels," *International Congress of Imaging Science 2006*, Rochester, NY, U.S.A., pp. 452-455, May 2006.
- [77] In Su Jang, Chang Hwan Son, Tae Yong Park, Kyung Woo Ko, and Yeong Ho Ha, "Colorimetric

- Characterization Based on Color Correlation in CMYKGO Printer," *Electronic Imaging 2006*, San Jose, CA, U.S.A., vol. 6058, pp. 60580P-1 - 60580J-10, Jan. 2006.
- [78] Jong Man Kim, Kee Hyon Park, Oh Seol Kwon, Yang Ho Cho and Yeong Ho Ha, "Illuminant-Adaptive Color Reproduction for a Mobile Display," *Electronic Imaging 2006*, San Jose, CA, U.S.A., vol. 6058, pp. 60580J-1 - 60580J-9, Jan. 2006.
- [79] Jong Man Kim, Cheol Hee Lee, and Yeong Ho Ha, "Color Reproduction of Mobile Display for Outdoor Viewing Condition," *The 6th Japan-Korean Joint Symposium on Imaging Materials and Technologies 2005*, Busan, Korea, pp. 88-98, Dec. 2005.
- [80] Tae Yong Park, Oh Seol Kwon, Myong Young Lee, and Yeong Ho Ha, "Improved Multi-level Screening with MJBNM for Smooth Tone Transition," *The 6th Japan-Korean Joint Symposium on Imaging Materials and Technologies 2005*, Busan, Korea, pp. 1-7, Dec. 2005.
- [81] Chang Hwan son, Yang Ho Cho, Kee Hyon Park, and Yeong Ho Ha, "Six Color Separation Using the Additional Colorants with Less Dot Visibility," *Thirteenth Color Imaging Conference: Color Science and Engineering*, Scottsdale, AZ, U.S.A., pp.189-194, Nov. 2005.
- [82] Dong Woo Kang, Yang Ho Cho, Myong Young Lee, and Yeong Ho Ha, "Color Signal Decomposition Method Using 3-D Gamut Boundary of Multi-Primary Display," *IEEE International Conference on Image Processing*, Genova, Italy, pp. 401-404, Sep. 2005.
- [83] Jae Hyun Kwon, Tae Yong Park, Chang Hwan Son, and Yeong Ho Ha, "Text Enhancement Error Diffusion with Homogeneous Halftone Patterns in Complex Document," *Proceedings of ITC-CSCC 2005*, Jeju, Korea, vol. 4, pp. 1619-1620, Jul. 2005.
- [84] Myong Young Lee, Cheol Hee Lee, Jung Hyang Park, and Yeong Ho ha, "A Lamp-lit Image Rendering of Automotive Rear Lamp Using Spectral-based Ray Tracing Method," *SAE 2005 World Congress*, Cobo Center, Detroit, U.S.A., Apr. 2005
- [85] Myong Young Lee, Cheol Hee Lee, and Yeong Ho ha, "Effective Rendering Simulation of Light Lamp Based on Spectral Characteristics," *FCV 2005 Proceedings of The 11th Japan-Korea Joint Workshop on Frontiers of Computer Vision*, Gwangju, Korea, pp. 183-188, Jan. 2005.
- [86] Jae Hyun Kwon, Yun Tae Kim, Tae Yong Park, and Yeong Ho Ha, "Efficient Text Segmentation and Adaptive Color Error Diffusion for Text Enhancement," *Electronic Imaging 2005*, San Jose, U.S.A., vol. 5667, pp. 489-500, Jan. 2005.
- [87] Dong Woo Kang, Yun Tae Kim, Yang Ho Cho, Kee Hyon Park, Won Hee Choe, and Yeong Ho Ha, "Color Decomposition Method for Multiprimary Display Using 3D LUT in Linearized LAB space," *Electronic Imaging 2005*, San Jose, U.S.A., vol. 5667, pp. 354-363, Jan. 2005.
- [88] Jae Hyun Kwon, Tae Yong Park, Yang Ho Cho, Cheol Hee Lee, and Yeong Ho Ha, "Photo-text Segmentation in Complex Color Document," *The 5th Japan-Korean Joint Symposium on Imaging Materials and Technologies 2004*, Kyoto, Japan, pp. 44-47, Nov. 2004.
- [89] Hae Bong Im, Yang Ho Cho, Tae Yong Park, and Yeong Ho Ha, "Estimation of Nine Channel-Independent Tone Response Curves for Display Device Characterization," *2004 International Symposium on Intelligent Signal Processing and Communication Systems*, Seoul, Korea, pp. 238-243, Nov. 2004.
- [90] Hae Bong Im, Yang Ho Cho, Myong Young Lee, and Yeong Ho Ha, "Effective Channel-Independent Inverse Characterization Method for Display Device," *Twelfth Color Imaging Conference: Color Science and Engineering*, Scottsdale, AZ, U.S.A., pp. 170-175, Nov. 2004.
- [91] Kee Hyon Park, Myong Young Lee, Yang Ho Cho, and Yeong Ho Ha, "RGB Look-up Table Design for Color Matching Between Monitor and Mobile Display," *SPIE Optics East 2004*, Philadelphia, U.S.A., vol. 5603, pp. 291-301, Oct. 2004.
- [92] Oh Seol Kwon, Yang Ho Cho, Yun Tae Kim, and Yeong Ho Ha, "Illumination Estimation Based on Valid Pixel Selection in Highlight Region," *IEEE International Conference on Image Processing*, Singapore, pp. 2419-2422, Oct. 2004.
- [93] Oh Seol Kwon, Yang Ho Cho, Yun Tae Kim, and Yeong Ho Ha, "Estimation of Illuminant Chromaticity Based on CCD Camera Response Distribution in a Real-World Image," *2004 The*

*Second European Conference on Colour in Graphics, Imaging, and Vision*, Aachen, Germany, pp. 96-99, Apr. 2004.

- [94] Ho Keun Lee, Cheol Hwan Kim, and Yeong Ho Ha, "Modified Dynamic Programming for Fast Stereo Matching," *FCV 2004 The 10th Korea-Japan Joint Workshop on Computer Vision*, Fukuoka, Japan, pp. 13-18, Feb. 2004.
- [95] Tae Yong Park, Yang Ho Cho, Myong Young Lee, and Yeong Ho Ha, "Fast Multilevel Vector Error Diffusion Based on Adaptive Primary Color Selection," *Electronic Imaging 2004*, San Jose, U.S.A., vol.5293, pp. 322-332, Jan. 2004.
- [96] Chang Hwan Son, Yun Tae Kim, Cheol Hee Lee, and Yeong Ho Ha, "Six-Color Separation for Improving Graininess in a Middle Tone Region," *Electronic Imaging 2004*, San Jose, U.S.A., vol.5293, pp. 110-120, Jan. 2004.
- [97] Myong Young Lee, Cheol Hee Lee, Ho Keun Lee, and Yeong Ho Ha, "Improved Shading Model in Spectral-Based Ray Tracing Method," *IEEE International Conference on Image Processing*, Barcelona, Spain, pp. 28-29, Sep. 2003.
- [98] Yun Tae Kim, Yang Ho Cho, Cheol Hee Lee, and Yeong Ho Ha, "Color Look-Up Table Design for Gamut Mapping and Color Space Conversion," *DPP2003: IS&T's International Conference on Digital Production Printing and Industrial Applications*, Barcelona, Spain, pp. 28-29, May 2003.
- [99] Yang Ho Cho, Yun Tae Kim, Ho Keun Lee, and Yeong Ho Ha, "Image Dependent Gamut Mapping Based on Color Variations at Each Segmented Region," *DPP2003: IS&T's International Conference on Digital Production Printing and Industrial Applications*, Barcelona, Spain, pp. 26-27, May 2003.
- [100] Oh Seol Kwon, Cheol Hee Lee, Ho Keun Lee, and Yeong Ho Ha, "Improved Spectral-Reflectance (SR) Estimation Using Set of Principle Components Separately Organized for Each SR Population with Similar SRs," *IS&T's 2003 PICS Conference*, Rochester, U.S.A., pp. 562-565, May 2003.
- [101] Myong Young Lee, Cheol Hee Lee, Ho Keun Lee, and Yeong Ho Ha, "Ray Tracing Method Based on Spectral Distribution for Producing Realistic Images," *IS&T's 2003 PICS Conference*, Rochester, U.S.A., pp. 558-561, May 2003.
- [102] Ho Keun Lee, Sung Ryoul Cheon, and Yeong Ho Ha, "A 3D/2D Image Conversion Method Using the Concealment of Disparity Information," *FCV 2003 The 9th Korea-Japan Joint Workshop on Computer Vision*, Jeju, Korea, pp. 9-15, Feb. 2003.
- [103] Myong Hee Choi, Ho Keun Lee, and Yeong Ho Ha, "Test Based on Normal Scores for Efficient Edge Detection in Image," *Electronic Imaging 2003*, Santa Clara, California, U.S.A., vol. 5022, Jan. 2003.
- [104] Ho Keun Lee, Cheol Hwan Kim, Kyu Phil Han, and Yeong Ho Ha, "Stereo Sequence Transmission via Conventional Transmission Channel," *Electronic Imaging 2003*, Santa Clara, California, U.S.A., vol. 5022, Jan. 2003.
- [105] Cheol Hwan Kim, Ho Keun Lee, and Yeong Ho Ha, "Disparity Space Image Based Stereo Matching Using Optimal Path Searching," *Electronic Imaging 2003*, Santa Clara, California, U.S.A., vol. 5022, Jan. 2003.
- [106] Soon Chang Lee, Yun Tae Kim, Yang Ho Cho, and Yeong Ho Ha, "Improved Vector Error Diffusion for Reduction of Smear Artifact in the Boundary Region," *Electronic Imaging 2003*, Santa Clara, California, U.S.A., vol. 5008, pp. 455-466, Jan. 2003.
- [107] Yang Ho Cho, Yun Tae Kim, Cheol Hee Lee, and Yeong Ho Ha, "Color Image Enhancement Technique Using Gamut Mapping Based on Color Space Division," *Electronic Imaging 2003*, Santa Clara, California, U.S.A., vol.5008, pp. 81-91, Jan. 2003.
- [108] Yun Tae Kim, Yang Ho Cho, Cheol Hee Lee, and Yeong Ho Ha, "Estimation of Spectral Distribution of Scene Illumination from a Single Image with Chromatic Illuminant," *Electronic Imaging 2003*, Santa Clara, California, U.S.A., vol. 5008, pp. 171-181, Jan. 2003.
- [109] Soon Chang Lee, Yang Ho Cho, Yun Tae Kim, and Yeong Ho Ha, "Reduction of Smear Artifact in Vector Error Diffusion Using Vector Norm and Angle," *Japan-Korean Joint Symposium on Imaging Materials and Technologies 2002*, Yokohama, Japan, pp. 7-11, Nov. 2002.

- [110] Yun Tae Kim, Yang Ho Cho, Cheol Hee Lee, and Yeong Ho Ha, "Color Halftoning Method Using Modified Jointly-Blue Noise Mask," *China-Korea Joint Conference on Communication & Information Technology*, Xidian Univ., China, pp. II-16 ~ II-20, Oct. 16-17, 2002.
- [111] Gak Min, Ho Keun Lee, Kyu Phil Han, and Yeong Ho Ha, "Stereo Matching by Modified Windowed Fourier Phase," *Proceedings of The 2002 International Conference on Electronics, Information and Communications*, Ulaanbaatar, Mongolia, pp. 224-227, Jul. 2002.
- [112] Joo Won Kim, Dae Wha Seo, Yeong Ho Ha, Kuk Ho Bae, and Jae Cheon Lee "Embedded LiNux Porting on TV System," *Proceedings of The 2002 International Conference on Electronics, Information and Communications*, Ulaanbaatar, Mongolia, pp. 178-181, Jul. 2002.
- [113] Yang Ho Cho, Yun Tae Kim, Cheol Hee Lee, and Yeong Ho Ha, "Gamut Mapping Based on Color Space Division for Enhancement of Lightness Contrast and Chrominance," *International Congress on Imaging Science 2002*, Tokyo, Japan, pp. 455-456, May 2002.
- [114] Ho Keun Lee, Jae Cheol Kim, Yun Tae Kim, and Yeong Ho Ha, "Adaptive Hierarchical Stereo Matching Using Object Segmentation and Window Warping," *Electronic Imaging 2002*, San Jose, U.S.A., vol. 4660, pp. 358-366, Jan. 2002.
- [115] Ho Keun Lee, Yun Tae Kim, and Yeong Ho Ha, "3D Modeling Using Image Simplification," *FCV 2002 The 8th Korea-Japan Joint Workshop on Computer Vision*, Hokkaido University, Sapporo, Japan, pp. 62-68, Jan. 2002.
- [116] Yong Sung Kwon, Yun Tae Kim, Ho Keun Lee, and Yeong Ho Ha, "Modified Jointly-Blue Noise Masks Approach Using S-CIELAB Color Difference," *Ninth Color Imaging Conference: Color Science and Engineering*, Scottsdale, U.S.A., pp. 194-198, Nov. 2001.
- [117] Cheol Hee Lee, Eung Joo Lee, and Yeong Ho Ha, "A New Visibility Testing Algorithm of Automotive Headlamps Based on Multi-Spectral Imaging," *Proceedings of ITC-CSCC 2001*, Tokushima, Japan, vol. 1, pp. 474-477, Jul. 2001.
- [118] Ho Young Lee, Hee Soo Kim, Ho Keun Lee, Yun Tae Kim, and Yeong Ho Ha, "Image Retrieval Using Descriptor of Spatial Color Distribution," *Proceedings of ITC-CSCC 2001*, Tokushima, Japan, vol. 2, pp. 885-888, Jul. 2001.
- [119] Yun Tae Kim, Jeong Yeop Kim, Ho Keun Lee, and Yeong Ho Ha, "Estimation of Spectral Distribution of Scene Illumination Using Perceived Illumination and Highlight from a Single Color Image," *Proceedings of the Third International Conference on Multispectral Color Science MCS'01*, Joensuu, Finland, pp. 73-76, Jun. 2001.
- [120] Cheol Hee Lee, Hyun Ju Song, Guk Sagong, and Yeong Ho Ha, "Calculation of Nighttime Road Image under Automotive Headlamp Lights," *SAE 2001 World Congress*, Detroit, U.S.A., Mar. 2001.
- [121] Ho Keun Lee, Sun Kyu Kwon, Hee Soo Kim, and Yeong Ho Ha, "Hierarchical 3D Modeling Using Feature Points And Spatio-Temporal Relationship," *International Workshop on Advanced Image Technology 2001*, Taejon, Korea, pp.787-797, Feb. 2001.
- [122] Jae Chul Kim, Ho Keun Lee, Ho Young Lee, and Yeong Ho Ha, "Stereo Matching Using Adaptive Window Warping," *Korea-Japan Joint Workshop on Computer Vision*, Seoul, Korea, vol. 7, pp. 25-31, Feb. 2001.
- [123] Yong Ki Kim, Eui Yoon Chung, Jeong Yeop Kim, and Yeong Ho Ha, "Effect of Ambient Light Source for Appearance of Color Image on CRT Monitor," *Electronic Imaging, Proceeding of SPIE 4300*, San Jose, U.S.A., Jan. 2001.
- [124] Hee Soo Kim, Ho Keun Lee, Ho Young Lee, and Yeong Ho Ha, "Digital Watermarking Based on Color Differences," *Electronic Imaging, Proceeding of SPIE 4310*, San Jose, U.S.A., Jan. 2001.
- [125] Ho Young Lee, Ho Keun Lee, Hee Soo Kim, and Yeong Ho Ha, "Color Image Retrieval Using Compressed Chromaticity and Color Edge Information," *Electronic Imaging, Proceeding of SPIE 4315*, San Jose, U.S.A., Jan. 2001.
- [126] Ho Keun Lee, Sun Kyu Kim, Hee Soo Kim, and Yeong Ho Ha, "3D Modeling Using Hierarchical Feature Point and Spatio-Temporal Relationship," *Proceeding of SPIE Visual Communications and Image Processing 2001*, San Jose, U.S.A., pp.787-797, Jan. 2001.

- [127] Eui Yoon Chung, Ho Keun Lee, Hyung Suk Kim, and Yeong Ho Ha, "Object Segmentation Using Skin Color and Motion Information," *Proceeding of SPIE Visual Communications and Image Processing 2001*, San Jose, U.S.A., pp.745-753, Jan. 2001.
- [128] Yeong Ho Ha, "Color Image Halftoning by CMY Printing Based on Rotated BNM Scheme," *Japan-Korean Joint Symposium on Imaging Materials and Technologies 2000*, Osaka, Japan, pp. 29-32, Dec. 2000.
- [129] Yun Tae Kim, Jeong Yeop Kim, Hee Soo Kim, and Yeong Ho Ha, "Halftoning Method by CMY Printing Based on BNM," *Eighth Color Imaging Conference: Color Science and Engineering*, Scottsdale, U.S.A., pp. 252-256, Nov. 2000.
- [130] Yun Tae Kim, Jeong Yeop Kim, Hee Soo Kim, and Yeong Ho Ha, "Halftoning Method by CMY Printing Using BNM," *Proceedings of International Technical Conference on Circuits/Systems, Computers, and Communications*, Pusan, Korea, vol. 2, pp. 851-854, Jul. 2000.
- [131] Hee Soo Kim, Eui Yoon Chung, Jin Woo Park, and Yeong Ho Ha, "Digital Watermarking Using Color Space Conversion," *Proceedings of International Technical Conference on Circuits/Systems, Computers, and Communications*, Pusan, Korea, vol. 1, pp. 470-473, Jul. 2000.
- [132] Jae Chul Kim, Ho Keun Lee, Sun Kyu Kwon, and Yeong Ho Ha, "Stereo Matching Using an Adaptive Window Warping," *Proceedings of International Technical Conference on Circuits/Systems, Computers, and Communications*, Pusan, Korea, vol. 1, pp. 421-424, Jul. 2000.
- [133] Cheol Hee Lee, Weon Hee Choi, Eung Joo Lee, and Yeong Ho Ha, "Digital Halftoning Based on Color Correction Using Neural Network with Uniform Color Samples and Vector Error Diffusion," *Electronic Imaging, SPIE*, San Jose, U.S.A., vol. 3963, pp.415-422, Jan. 2000.
- [134] Tae Min Bae, Sun Kyu Kwon, Gi Seok Kim, and Yeong Ho Ha, "Intermediate View Synthesis Using Trilinearity of Stereo Image and Virtual View," *6th Korea-Japan Joint Workshop on Computer Vision*, Nagoya, Japan, pp.92-97, Oct. 1999.
- [135] Cheol Hee Lee, Weon Hee Choi, and Yeong Ho Ha, "Color Halftoning Based on Color Correction Using Selective Vector Error Diffusion," *Japan Hardcopy '99 Fall Meeting (The conference of Japan Hardcopy for the Imaging Society of Japan)*, Kyoto, Japan, pp.92-97, Oct. 1999.
- [136] Cheol Hee Lee, Ho Young Lee, Yang Woo Park, and Yeong Ho Ha, "Colorimetric Printer Calibration Using Modified Sigmoidal Tone-Curve Function," *Seventh Color Imaging Conference: Color Science, Systems, and Applications*, Scottsdale, U.S.A., pp.92-97, Oct. 1999.
- [137] Jeong Hoon Lee, Cheol Hee Lee, and Yeong Ho Ha, "Estimation of Spectral Distribution of Illumination Using Maximum Achromatic Region," *International Symposium on Multispectral Imaging and Color Reproduction for Digital Archives*, Chiba, Japan, pp.92-97, Oct. 1999.
- [138] Cheol Hee Lee, Eui Yoon Chung, Chae Soo Lee, Eung Joo Lee, and Yeong Ho Ha, "Tone Reproduction Technique Using Neural in Inkjet Printers," *Third International Conference on Knowledge-based Intelligent Information Engineering Systems*, Adelaide, Australia, pp.103-106, Aug.1999.
- [139] Tae Min Bae, Kyu Phil Han, Sun Kyu Kwon, and Yeong Ho Ha, " Simple Structured MPEG-2 MVP Stereoscopic Encoder," *Proceedings of International Technical Conference on Circuits/Systems, Computers, and Communications*, Niigata, Japan, pp.947-950, Jul. 1999.
- [140] Eui Yoon Chung, Cheol Hee Lee, Jin Woo Park, and Yeong Ho Ha, "Image Segmentation Using Skin Color and Motion Information for Object-based Coding," *Proceedings of International Technical Conference on Circuits/Systems, Computers, and Communications*, Niigata, Japan, pp.931-934, Jul. 1999.
- [141] Kun Woen Song, Eui Yoon Chung, Jin Woo Park, Gi Seok Kim, Eung Joo Lee, and Yeong Ho Ha, "Video Segmentation Algorithm Using A Combined Similarity Measure for Content-based Coding," *Picture Coding Symposium'99*, Portland, U.S.A., pp.261-264, Apr. 1999.
- [142] Chae Soo Lee, Kyeong Man Kim, Eung Joo Lee, and Yeong Ho Ha, "Gamut Mapping Using Variable Anchor Points," *Electronic Imaging, SPIE*, San Jose, U.S.A., vol. 3648, pp.129-139, Feb. 1999.

- [143] Chae Soo Lee, Cheol Hee Lee, Yang Woo Park, and Yeong Ho Ha, "Expanded Nonlinear Order Dithering and Modified Error Diffusion for an Ink-Jet Color Printer," *Electronic Imaging, SPIE*, San Jose, U.S.A., vol.3648, pp.541-550, Feb. 1999.
- [144] Kyu Phil Han, Tae Min Bae, Eui Yoon Chung, and Yeong Ho Ha, "A Compact Stereo Matching Algorithm Using Simplified Population-based Incremental Learning," *5th Korea-Japan Joint Workshop on Computer Vision*, Daegu, Korea, pp.34-39, Jan. 1999.
- [145] Kyeong Man Kim, Chae Soo Lee, Cheol Hee Lee, and Yeong Ho Ha, "Color Image Enhancement by Highlight-Preserving Vector Transformation and Nonlinear Mapping," *IEEE International Conference on Image Processing (ICIP'98)*, Chicago, U.S.A., Oct.1998.
- [146] Cheol Hee Lee, Kyeong Man Kim, Chae Soo Lee, Jae Min Lee, and Yeong Ho Ha, "Blue Noise Halftoning Based on Printer Model," *Proceedings of International Technical Conference on Circuits/Systems, Computers, and Communications*, Sokcho, Korea, pp.927-930, Jul. 1998.
- [147] Ho Young Lee, Hee Soo Kim, Jin Woo Park, and Yeong Ho Ha, "Edge-Sensitive Image Interpolation," *Proceedings of International Technical Conference on Circuits/Systems, Computers, and Communications*, Sokcho, Korea, pp.232-236, Jul. 1998.
- [148] Eui Yoon Chung, Kyu Phil Han, Tae Min Bae, and Yeong Ho Ha, "Efficient Image Analysis Using Color and Motion for Object-based Coding," *Proceedings of International Technical Conference on Circuits/Systems, Computers, and Communications*, Sokcho, Korea, pp.11-14, Jul. 1998.
- [149] Kyu Phil Han, Yong Suk Kim, and Yeong Ho Ha, "Stereo Matching Using Genetic Algorithm and Region Information," *Proceeding of 4th Japan-Korea Joint Workshop on Computer Vision*, Tokyo, Japan, pp. 85-89, Feb. 1998.
- [150] Shin Dong Kim, Cheol Hee Lee, Kyeong Man Kim, Chae Soo Lee, and Yeong Ho Ha, "Image Dependent Gamut Mapping Using A Variable Anchor Point," *EI'98: IS&T/SPIE's Symposium on Electronic Imaging: Science & Technology*, San Jose, U.S.A., pp. 129-137, Jan. 1998.
- [151] Kyeong Man Kim, Cheol Hee Lee, Chae Soo Lee, and Yeong Ho Ha, "Color Image Enhancement by Fundamental Vector Transformation and Nonlinear Mapping," *5th IS&T/SID Color Imaging Conference*, Scottsdale, U.S.A., pp. 153-157, Nov. 1997.
- [152] Jin Woo Park, Young Sik Park, Kun Woen Song, Jae Yeal Nam, and Yeong Ho Ha, "Connectivity and Geometry Compression of 3D Object Based on Adaptive Bits Allocation and DFSVQ," *1997 Picture Coding Symposium*, Berlin, Germany, pp. 479-483, Sep. 1997.
- [153] Kun Woen Song, Young Sik Park, Kyu Phil Han, Yong Suk Kim, and Yeong Ho Ha, "Image Segmentation Using Contrast and Contour Simplification for Very Low Bit Rate Coding," *1997 Picture Coding Symposium, Berlin, Germany*, pp. 189-193, Sep. 1997.
- [154] Kun Woen Song, Young Sik Park, Kyu Phil Han, and Yeong Ho Ha, "Image Segmentation Based on Hierarchical Structure and Region Merging Using Contrast for Very Low Bit Rate Coding," *International Workshop on Synthetic-Natural Hybrid Coding and Three Dimensional Imaging*, Rhodes, Greece, pp. 294-297, Sep. 1997.
- [155] Cheol Hee Lee, Chae Soo Lee, Kyeong Man Kim, and Yeong Ho Ha, "Color Matching Using Dot Gain and Intensity Compensation for Different Papers," *IS&T/SPIE's Symposium on Electronic Imaging: Science & Technology*, San Jose, U.S.A., pp. 286-292, Feb. 1997.
- [156] Kyu Phil Han, Young Sik Park, Yong Suk Kim, and Yeong Ho Ha, "Relaxation Algorithm to Solve Correspondence Problems," *Proceedings of the 3rd Korea-Japan Joint Workshop on Computer Vision*, Kyongju, Korea, pp. 104-109, Jan. 1997.
- [157] Yong Suk Kim, Kyu Phil Han, and Yeong Ho Ha, "Depth Estimation from Stereo Image Pairs," *Proceedings of International Workshop on Computer Vision Technology*, pp. 35-40, Dec. 1996.
- [158] Gi Seok Kim, Young Sik Park, Kun Woen Song, and Yeong Ho Ha, "Adaptive Contour Representation Based on Morphological Segmentation," *Proceedings of IEEE Asia Pacific Conference on Circuits and Systems'96*, Seoul, Korea, pp. 141-144, Nov. 1996.
- [159] Yong Suk Kim, Kyu Phil Han, Eung Joo Lee, and Yeong Ho Ha, "Robust 3-D Depth Estimation Using Genetic Algorithm in Stereo Image Pairs," *Proceedings of IEEE Asia Pacific Conference on*

- Circuits and Systems'96*, Seoul, Korea, pp. 357-360, Nov. 1996.
- [160] Young Sik Park, Gi Seok Kim, Yong Suk Kim, Kun Woen Song, and Yeong Ho Ha, "Efficient Hierarchical Segmentation Based on PSNR for Low Bit Rate Coding," *Proceedings of IEEE Asia Pacific Conference on Circuits and Systems'96*, Seoul, Korea, pp. 157 - 160, Nov. 1996.
- [161] Kun Woen Song, Young Sik Park, Gi Seok Kim, Kyeong Man Kim, and Yeong Ho Ha, "Hierarchical Image Segmentation Using Region Merging Based on Contrast for Very Low Bit Rate Coding," *Third Joint Workshop on Multimedia Communications*, Daegu, Korea, pp.: 7-2-1 - 7-2-7, Oct. 1996.
- [162] Kyeong Man Kim, Chae Soo Lee, Eung Joo Lee, and Yeong Ho Ha, "Color Image Quantization Using Weighted Distortion of HVS Color Activity," *IEEE Intl. Conf. on Image Processing, IICIP'96*, Lausanne, Switzerland, vol. 3, pp. 1035-1040, Sep. 1996.
- [163] Yang Woo Park, Eung Joo Lee, Kyeong Man Kim, Chae Soo Lee, and Yeong Ho Ha, "Color Enhancement by New Quantization of Fast Clustering Method," *Proceedings of 5th International Conference on High Technology: Imaging Science and Technology, Evolution and Promise*, Chiba, Japan, pp. 275-281, Sep. 1996.
- [164] Kyeong Hoon Do, Yong Suk Kim, and Yeong Ho Ha, "Iterative Relaxational Stereo Matching Based on Adaptive Support between Disparities," *Proceedings of the 2nd Japan-Korea Joint Workshop on Computer Vision*, Takamatsu, Japan, pp. 121-126, Feb. 1996.
- [165] Hyun Sik Ahn, Jin Tae Choi, Kwan Hee Lee, and Yeong Ho Ha, "Automation of a Reclaimer Using Global and Local Range Finding systems," *Proceedings of SPIE: Machine Vision Applications in Industrial Inspection 4*, San Jose, U.S.A., vol. 2665, pp. 26-35, Jan. 1996.
- [166] Eung Joo Lee, Yang Woo Park, Young Sik Park, and Yeong Ho Ha, "Luminance Compensation Method for High Quality TV Picture," *IEEE Asia-Pacific Workshop on Mobile Telecommunication*, Kyongju, Korea, pp. 105-108, Dec. 1995.
- [167] Chae Soo Lee, Kyeong Man Kim, Eung Joo Lee, and Yeong Ho Ha, "Color Quantization and Dithering Method Based on HVS Characteristics," *3rd IS&T/SID Color Imaging Conference*, Scottsdale, U.S.A., pp. 90-92, Nov. 1995.
- [168] Han Kyu Lee, Jae Yeal Nam, and Yeong Ho Ha, "Flexible VLSI Architecture for Block-Matching Motion Estimation Algorithm," *Joint Workshop on Multimedia Communications '95*, Kyoto, Japan, pp. (5-3-1) -(5-3-8), Oct. 1995.
- [169] Kyeong Man Kim, Eung Joo Lee, Yang Woo Park, and Yeong Ho Ha, "Color Image Quantization Using Weighted Distortion Measure of HVS Color Activity," *Joint Technical Conference on Circuits/Systems, Computers, and Communications'95*, Kumamoto, Japan, pp. 177-180, Jul. 1995.
- [170] Jeong Yeop Kim, Sung Ho Bae, Eung Joo Lee, and Yeong Ho Ha, "Color Image Enhancement Based on Block Matching Algorithm," *2nd IS&T/SID Color Imaging Conference*, Scottsdale, U.S.A., pp.131-134, Nov. 1994.
- [171] Hae Kwan Jung, Choon Pyo Hong, Jin Soo Choi, and Yeong Ho Ha, "A VLSI Architecture for the Alternative Subsampling Based Block Matching Algorithm," *IEEE ISPACS'94*, Seoul, Korea, pp.378-383, Nov. 1994.
- [172] Jin Soo Choi, Yeong Ho Ha, "Adaptive Quantization Using Vector Codebook of Quantizer," *JW-MMC 94'*, Taejon, Korea, pp.154-162, Oct. 1994.
- [173] Kun Woen Song, Ki Seok Kim, Kyeong Hoon Do, and Yeong Ho Ha, "Classification of Scaled Texture Image Using Normalized Pattern Spectrum Based on Mathematical Morphology," *Joint Technical Conference on Circuits/Systems, Computers, and Communications*, Kongju, Korea, pp.649-654, Jul. 1994.
- [174] Jin Soo Choi, Hyun Son, and Yeong Ho Ha, "Adaptive Quantization Using Vector Codebook of Quantizer in HDTV," *International Conf. on Communication Technology'94*, Shanghai, China, pp. 333-336, Jun. 1994.
- [175] Jeong Yeop Kim and Yeong Ho Ha, "Pseudo-Linearly Modified IHS Color Model and its Application to Color Image Enhancement," *1st IS&T/SID Color Imaging Conf.*, Scottsdale, U.S.A.,

pp.23-27, Nov. 1993.

- [176] Gi Seok Kim, Kyeong Hoon Do, Kab Hyun Kwon, and Yeong Ho Ha, "Texture Classification Using Morphological Pattern Spectrum Based on Morphological Subband decomposition," *Proceedings of Joint Technical Conference on Circuits/Systems, Computers, and Communications*, Nara, Japan, pp. 212-216, 1993.
- [177] Yong Suk Kim, Jun Jae Lee, and Yeong Ho Ha, "Hierarchical Stereo Matching in Wavelet Transformed Domain Using Neural Network," *ACCV '93*, Osaka, Japan, pp.418-421, 1993.
- [178] Jeong Yeup Kim and Yeong Ho Ha, "Color Image Enhancement Using Color Constancy Based on Modified IHS Coordinate System," *SPIE '93*, San Jose, U.S.A., pp.359-368, 1993.
- [179] Young Sik Park, Jun Jae Lee, Jin Soo Choi, and Yeong Ho Ha, "An Adaptive Noise Canceling Scheme in Mobile Communication," *APCC '93*, Taejon, Korea, pp. 664-668, 1993.
- [180] Ki Ho Hyun, In Gab Jeong, Jun Jae Lee, and Yeong-Ho Ha, "Hopfield Neural Network Approach for Surface Segmentation," *ICIP'92*, Singapore, pp. 536-540, Sep. 1992.
- [181] Jeong Yeop Kim, Jae Chang Shim, and Yeong Ho Ha, "Color Image Enhancement Based on Modified IHS Coordinate System," *SPIE'92*, San Jose, U.S.A., pp. 366-377, Nov. 1992.
- [182] Jeong Yeop Kim, Seung Ok Park, and Yeong Ho Ha, "Color Image Enhancement Using Pseudo-linear IHS-based Coordinate System," *Proceedings of the 4th ROK-ROC Metrology symposium*, Taejon, Korea, pp.335-340, 1992.
- [183] Jae Chang Shim, Ki Ho Hyun, Jun Jae Lee, and Yeong Ho Ha, "Adaptive Directional Median-averaging Hybrid Filter," *Proceeding of Joint Technical Conference on Circuits/Systems, Computers, and Communications*, Kyongju, Korea, pp. 812-815, 1992.
- [184] Jun Jae Lee and Yeong Ho Ha, "Neural Network Modeling of new Energy Function for Stereo Matching," *SPIE Conf. on Intelligent Robot & Computer Vision*, Boston, U.S.A., pp.490-495, 1991.
- [185] Jun Jae Lee, Seok Jae Cho, and Yeong Ho Ha, "Stereo Matching Using Neural Network of an Optimized Energy Function," *Proceeding of Korea-Japan Joint Workshop on Computer Vision*, Seoul, Korea, pp.114-118, 1991.
- [186] Yeong Ho Ha and Soo Joong Kim, "A New Image Interpolation: A Comparative Study," *Proceeding of ICEIC'91*, Yanji, China, pp.141-146, 1991.
- [187] Suck Hyun Kim, Yeong Ho Ha, and Soo Joong Kim, "Pyramidal VQ Image Coding by DCT Classifier Based on HVS," *Proceeding of Joint Technical Conference on Circuits/Systems, Computers, and Communications*, Cheju, Korea, pp.187-194, 1991.
- [188] Byung Gil Lee and Yeong Ho Ha, "Space-Variant B-Spline Functions for Image Interpolation," *Proceeding of Joint Technical Conference on Circuits/Systems, Computers, and Communications*, Cheju, Korea, pp.408-413, 1990/1992.
- [189] Ji Hyun Lee, Hyun Sik Ahn, and Yeong Ho Ha, "Global Coordinate Extraction of IC Chip Pattern Using Form Matching via Color Image Processing," *International Conference on VLSI and CAD*, Seoul, Korea, pp.205-208, 1989.
- [190] Kyung Soo Kim and Yeong Ho Ha, "Edge-sharpened B-Spline Interpolation in Digital Image Processing," *Proceeding of Joint Technical Conference on Circuits/Systems, Computers, and Communications*, Sapporo, Japan, pp. 340-345, 1989.
- [191] Sang Yun Yoon, Kwang Ho Lee, Seok Je Cho, and Yeong Ho Ha, "Improved Optical Flow Calculation Using Scalar Edges," *Proceeding of Joint Technical Conference on Circuits/Systems, Computers, and Communications*, Seoul, Korea, pp.136-141, 1988.
- [192] Ho Sun Jung, Dong Hoon Lee, Ki Hong Kim, Ki Dong Jang, Yoon Sup Bae, Nam Chul Kim, Woo Il Kim, and Yeong Ho Ha, "Automated Extraction of EDAS\_P and PSPICE Circuit Models from A VLSI Chip Using Image Processing Methods," *Proceeding of IEEE TENCON*, Seoul, Korea, pp.271-276, 1987.
- [193] Won Ho Kim, Soo Joong Kim, and Yeong Ho Ha, "A Modified Raised-Cosine Interpolation in Digital Image Processing," *Proceeding of Joint Technical Conference on Circuits/Systems, Computers, and Communications*, Seoul, Korea, pp.107-112, 1986.



### **Domestic Conferences(in Korean)**

- [1] Ji Hoon Yoo, Bong Seok Choi, and Yeong Ho Ha, "Automatic Image Correction Algorithm for Post-Processing in Digital Cinema Production," Proceeding of the 2015Korea Signal Processing Conference, Wonju, Korea, pp.76-79, Nov. 2015.
- [2] Bong Seok Choi, Jung Min Sung, Cheol Hee Lee, and Yeong Ho Ha, "Evaluation of Perceived Image Quality Factors and Color Reproduction Characteristics of Mobile LCD and OLED," Korea Society for Imaging Science and Technology, Busan, Korea, pp. 76-78, Nov. 2015.
- [3] Seung Yun Lee, Ho Gun Ha, Ji Hoon Yoo, and Yeong Ho Ha, "Tone Mapping for Visibility Enhancement of High Dynamic Range Image Using Gamma Correction Map," Korea Multimedia Society, Daegu, Korea, pp. 47-50, Nov. 2015.
- [4] Wang Jun Kyung, Ji Hoon Yoo, Cheol Hee Lee, and Yeong Ho Ha, "Color Matching in Stereoscopic Images Based on Integrated Color Constancy Algorithms," Korea Society for imaging Science and Technology, Busan, Korea, pp. 42-44, June 2015.
- [5] Ji Hoon Yoo, Ho Gun Ha, Shibudas Kattakkalil Subhashdas, and Yeong Ho Ha, "Image Normalization for Digital Intermediate in Digital Cinema, " Proceeding of Workshop on 2015 Image Processing and Image Understanding, Jeju, Korea, Feb. 2015.
- [6] Ji Heon Lee, Dae Chul Kim, Bong Seok Choi, and Yeong Ho Ha, "Illumination Estimation based on Dominant Chromaticity Assessment in Nonnegative Matrix Factorization with sparseness constraints," Proceeding of the 2014 Korea Signal Processing Conference, Seoul, Korea, pp. K14-86-1 - K14-86-4, Sep. 2014.
- [7] Eui Won Nam, Bong Seok Choi, Ji Hoon Yoo, and Yeong Ho Ha, " Perceptual Contrast Measure in Display Gamut Considering Perceived Brightness Difference," *Korea Society for imaging Science and Technology*, Seoul, Korea, pp. 118-121, May. 2014.
- [8] Yuan Xi, Ho Gun Ha, Cheol Hee Lee, and Yeong Ho Ha, " Ghost-free Exposure Fusion Based on Consistency Assessment in Temporal Domain," *Korea Society for imaging Science and Technology*, Seoul, Korea, pp. 122-125, May. 2014.
- [9] Dae Chul Kim, Bong Seok Choi, and Yeong Ho Ha, " Color Smearing Reduction for Digital Still Camera," *Proceeding of Workshop on 2014 Image Processing and Image Understanding*, Jeju, Korea, pp. 122, Feb. 2014.
- [10] Wang Jun Kyung, Bong Seok Choi, Cheol Hee Lee, and Yeong Ho Ha, " Multi-Scale Gray World Algorithm for Enhancement of Faded Image," *Korea Society for imaging Science and Technology*, Busan, Korea, pp.74-75, Nov. 2013.
- [11] Wang Jun Kyung, Dae Chul Kim, Bong Seok Choi, and Yeong Ho Ha, " Faded Color Correction based on Integrated Gray World Algorithm," *Proceeding of the 2013 Korea Signal Processing Conference*, Daejeon, Korea, pp.183-185, Oct. 2013.
- [12] Dae Chul Kim, Wang Jun Kyung, Bong Seok Choi, and Yeong Ho Ha, " Moire Reduction using Analysis of Moire Pattern in Spatial and Frequency Domain," *Proceeding of the 2013 Korea Signal Processing Conference*, Daejeon, Korea, pp.186-188, Oct. 2013.
- [13] Ran Shu, Ho Gun Ha, Cheol Hee Lee and Yeong Ho Ha, " Color Correction between Stereo Images using Combined Color Matching," *Korea Society for imaging Science and Technology*, Incheon, Korea, pp. 91 - 93, May 2013.

- [14] Bong Seok Choi, Dae Chul Kim, and Yeong Ho Ha, " Acquisition of Multi-spectral Flash Image using Region based Weight Map," *Proceeding of Workshop on 2013 Image Processing and Image Understanding*, Jeju, Korea, pp. 36-1 - 36-5, Feb. 2013.
- [15] Bong Seok Choi, Dae Chul Kim, Cheol Hee Lee, and Yeong Ho Ha, "Color Correction of Multi-spectral Image using Weight Map," *Korea Society for Imaging Science and Technology*, Daegu, Korea, pp. 78-80, Nov. 2012.
- [16] Ji Hoon Yoo, Ho Gun Ha, Wang Jun Kyung, and Yeong Ho Ha, "Spectral Reflectance Estimation using Selective Training Set according to Correlation Coefficient," *Korea Society for Imaging Science and Technology*, Daegu, Korea, pp. 75-77, Nov. 2012.
- [17] Dae Chul Kim, Wang Jun Kyung, and Yeong Ho Ha, "Skin Tone Detection using Combined Skin Color Model and Feature Map," *Proceeding of the 2012 Korea Signal Processing Conference*, Suwon, Korea, pp.289-292, Sep. 2012.
- [18] Ji Hoon Yoo, Wang Jun Kyung, Ho Gun Ha, and Yeong Ho Ha, "Estimation of Reflectance based on Correlation with Adaptive Wiener Estimation," *Proceeding of the 2012 Korea Signal Processing Conference*, Suwon, Korea, pp.368-371, Sep. 2012.
- [19] Bong Seok Choi, Dae Chul Kim, Cheol Hee Lee, and Yeong Ho Ha, "Acquisition of Multispectral Image using Optimization Method with Weight Map," *Proceeding of the 2012 Korea Signal Processing Conference*, Suwon, Korea, pp.372-375, Sep. 2012.
- [20] Dae Chul Kim, Wang Jun Kyung, Cheol Hee Lee, and Yeong Ho Ha, "Preferred Color Reproduction based on Preferred Skin Colors," *Korea Society for imaging Science and Technology*, Seoul, Korea, pp.44-47, Jun. 2012.
- [21] Dae Chul Kim, Ho Gun Ha, Wang Jun Kyung, Cheol Hee Lee, and Yeong Ho Ha, "Selective Skin Color Reproduction using Multiple Preferred Skin Colors, " *Proceeding of Workshop on 2012 Image Processing and Image Understanding*, Jeju, Korea, Jan. 2012.
- [22] Il Su Park, Wang Jun Kyung, Dae Chul Kim, and Yeong Ho Ha, "Color Correction of DLP Projector using Hue-Shift Model, " *Korea Society for imaging Science and Technology*, Busan, Korea, pp.72-74, Nov. 2011.
- [23] In Young Song, Ho Gun Ha, Tae Hyung Lee and Yeong Ho Ha, "Gamut Mapping Algorithm for Preserving a Detail," *Korea Society for imaging Science and Technology*, Busan, Korea, pp.75-76, Nov. 2011.
- [24] Il Su Park, Wang Jun Kyung, Dae Chul Kim, and Yeong Ho Ha, "Color Correction using Hue-shift Modeling of DLP Projector," *Proceeding of the 2011 Korea Signal Processing Conference*, Gwangju, Korea, vol. 24, no. 1, pp. 249-251, Sep. 2011.
- [25] In Yong Song, Ho Gun Ha, Tae Hyung Lee, and Yeong Ho Ha, "Spatial Gamut Mapping using Regularization," *Proceeding of the 2011 Korea Signal Processing Conference*, Gwangju, Korea, vol. 24, no. 1, pp. 243-245, Sep. 2011.
- [26] Ho Gun Ha, Wang Jun Kyung, and Yeong Ho Ha, "Local Color Transfer Using Distance between Color Distribution based on Color Category," *Korea Society for Imaging Science and Technology*, Jeonju, Korea, pp. 56-57, Jun. 2011.
- [27] Wang Jun Kyung, Dae Chul Kim and Yeong Ho Ha, "Separative Color Correction for Enhancement of Faded Image," *Korea Society for Imaging Science and Technology*, Jeonju, Korea, pp. 54-55, Jun. 2011.
- [28] Woo Heon Jang, Tae Hyung Lee, Dae Chul Kim, Wang Jun Kyung, and Yeong Ho Ha, "Acquisition of Anaglyph Image by Compensating a Difference of Luminance," *Proceeding of Workshop on 2011 Image Processing and Image Understanding*, Jeju, Korea, Feb. 2011.

- [29] Woo Heon Jang, Tae Hyung Lee, and Yeong Ho Ha, "Image Enhancement for Fatigue Reduction of Eyes in Anaglyph," *Proceedings of the 2010 Korea Signal Processing Conference*, Seoul, Korea, vol. 23, no. 1, pp. 293-296, Oct. 2010.
- [30] Dae Chul Kim, Tae Hyung Lee, and Yeong Ho Ha, "Color Correction for Projected Image based on Correction Matrix using a Still Camera," *Proceedings of the 2010 Korea Signal Processing Conference*, Seoul, Korea, vol. 23, no. 1, pp. 315-318, Oct. 2010.
- [31] Wang Jun Kyung, Ho Gun Ha, Cheol Hee Lee, and Yeong Ho Ha, "Real-time Multi-scale Retinex to Enhance Night Scene of Vehicular Camera, " *Proceedings of the 2010 Korea Signal Processing Conference*, Seoul, Korea, vol. 23, no. 1, pp. 435-438, Oct. 2010.
- [32] Jung Yul Choi, Tae Hyung Lee, and Yeong Ho Ha, "Tone Mapping Using Section Compression of Local Contrast Factor based on Histogram," *Korea Society for Imaging Science and Technology*, Andong, Korea, pp. 26-27, Jun. 2010.
- [33] Wang Jun Kyung, Ho Gun Ha, and Yeong Ho Ha, "Real-time Enhancement for Night Scene Using Vehicular Camera based on Multi-scale Retinex," *Korea Society for Imaging Science and Technology*, Andong, Korea, pp. 30-31, Jun. 2010.
- [34] In Su Jang, Wang Jun Kyung, Chang Hwan Son, Kyeong Man Kim, and Yeong Ho Ha, "Adaptive Color Conversion in Printer to Monitor," *Proceeding of Workshop on 2010 Image Processing and Image Understanding*, Jeju, Korea, Jan. 2010.
- [35] Dae Chul Kim, Tae Hyung Lee, In Su Jang, Myong Hee Choi, and Yeong Ho Ha, "Color Correction Method for Projected Image on Colored-Screen Based on Camera," *Proceeding of Workshop on 2010 Image Processing and Image Understanding*, Jeju, Korea, Jan. 2010.
- [36] Dae Chul Kim, In Su Jang, Tae Hyung Lee, and Yeong Ho Ha, "Color Correction Method for Projected Image on Colored-Screen Based on Color Correction Matrix," *Korean Society for Imaging Science and Technology*, Pusan, Korea, vol. 32, pp. 25-27, Nov. 2009.
- [37] Ho Gun Ha, In Su Jang, and Yeong Ho Ha, "Subpixel Estimation in Noisy Image Using a Wiener Filtered Local Region," *Korean Society for Imaging Science and Technology*, Pusan, Korea, vol. 32, pp. 28-29, Nov. 2009.
- [38] Dae Chul Kim, Tae Hyung Lee, In Su Jang, and Yeong Ho Ha, "Color Correction for Projector on Colored-Screen," *Proceedings of the 2009 Korea Signal Processing Conference*, Pusan, Korea, vol. 22, no. 1, pp. 226-229, Sep. 2009.
- [39] Tae Hyung Lee, In Su Jang, Cheol Hee Lee, and Yeong Ho Ha, "Auto-Exposure Control Using LUT Based on Scene-Luminance Curve in Mobile Phone Camera," *Proceedings of the 2009 Korea Signal Processing Conference*, Pusan, Korea, vol. 22, no. 1, pp. 287-290, Sep. 2009.
- [40] In Su Jang, Tae Hyung Lee, and Yeong Ho Ha, "Color Correction in Image Enhancement Based on Retinex ," *Proceedings of the 2009 Korea Signal Processing Conference*, Pusan, Korea, vol. 22, no. 1, pp. 663-666, Sep. 2009.
- [41] Kyung Woo Ko, Tae Hyung Lee, and Yeong Ho Ha, "Colorization Algorithm Using Compensation of Difference Image Based on Characteristic Curve ," *Proceedings of the 2009 Korea Signal Processing Conference*, Pusan, Korea, vol. 22, no. 1, pp. 667-670, Sep. 2009.
- [42] Ho Gun Ha, In Su Jang, Tae Hyung Lee, and Yeong Ho Ha, "Subpixel Shift Estimation Using Iterative Phase Correlation of the Wiener Filtered Local Region," *Proceedings of the 2009 Korea Signal Processing Conference*, Pusan, Korea, vol. 22, no. 1, pp. 686,-689 Sep. 2009.
- [43] Wang Jun Kyung, Tae Hyung Lee, Cheol Hee Lee, and Yeong Ho Ha, "Color Correction Based on CIELAB Color Space Using Enhanced Integrated Multi-Scale Retinex," *Proceedings of the 2009 Korea Signal Processing Conference*, Pusan, Korea, vol. 22, no. 1, pp. 690-693, Sep. 2009.

- [44] Tae Hyoung Lee, Cheol Hee Lee, Hee Chan Park, and Yeong Ho Ha, "Auto-Exposure Control Using LUT Based on S-L Curve in Mobile Phone Camera," *Proceeding of Workshop on 2009 Image Processing and Image Understanding*, Jeju, Korea, pp. 64, Feb. 2009.
- [45] Massimo Fierro and Yeong Ho Ha, "A New Method of Skin Segmentation for Face Detection in Normalized RGB Color Space," *Proceeding of Workshop on 2009 Image Processing and Image Understanding*, Jeju, Korea, pp. 425, Feb. 2009.
- [46] Kyung Woo Ko, Tae Hyoung Lee, Myong Hee Choi, and Yeong Ho Ha, "Improved Median Filtering Based on Rank-Order Method for Effective Cancellation of Impulse Noise," *Korean Society for Imaging Science and Technology*, Seoul, Korea, vol. 30, pp. 62-63, Nov. 2008.
- [47] Wang Jun Kyung, Tae Hyoung Lee, Cheol Hee Lee, and Yeong Ho Ha, "Integrated MSR based on CIELAB Color Space and Saturation Compensation," *Proceedings of the 2008 Korea Signal Processing Conference*, Seoul, Korea, vol. 21, no. 1, pp. 10, Sep. 2008.
- [48] Ho Gun Ha, In Su Jang, Kyung Woo Ko, and Yeong Ho Ha, "Subpixel Estimation Using Iterative Phase Correlation of a Local Region," *Proceedings of the 2008 Korea Signal Processing Conference*, Seoul, Korea, vol. 21, no. 1, pp. 11, Sep. 2008.
- [49] Kyung Woo Ko, Kee Hyon Park, and Yeong Ho Ha, "Evaluation of Vehicular Camera Performance through ISO-based Image Quality Quantification," *Proceedings of IEEK Summer Conference 2008*, Pyeongchang, Korea, vol. 31, no. 1, pp. 855-856, Jun. 2008.
- [50] In Su Jang, Kee Hyon Park, and Yeong Ho Ha, "Color Image Enhancement Method Based on Multi-Scaled Retinex Considering Chromatic Distribution of Input Image," *Proceedings of IEEK Summer Conference 2008*, Pyeongchang, Korea, vol. 31, no. 1, pp. 845-846, Jun. 2008.
- [51] Tae Yong Park and Yeong Ho Ha, "Analysis of Image Quality in Color Image Compression," *Korean Society for Imaging Science and Technology*, Daegu, Korea, vol. 29, no. 1, pp. 3-6, Jun. 2008.
- [52] Wang Jun Kyung, Tae Hyoung Lee, Cheol Hee Lee, and Yeong Ho Ha, "Enhancement of Integrated Multi-Scale Retinex based on CIELAB Color Space," *Korean Society for Imaging Science and Technology*, Daegu, Korea, vol. 29, no. 1, pp. 45-46, Jun. 2008.
- [53] In Su Jang, Kee Hyon Park, Cheol Hee Lee, Myong Hee Choi, and Yeong Ho Ha, "Color Image Enhancement in Multi-Scaled Retinex," *Proceeding of Workshop on 2008 Image Processing and Image Understanding*, Jeju, Korea, pp. 70, Feb. 2008.
- [54] Soo Jin Sung, Chang Hwan Son, Oh Seol Kwon, Kee Hyon Park, and Yeong Ho Ha, "A Color Compensation Method for a Projector Considering Average Lightness of the Projected Image," *Proceeding of Workshop on 2008 Image Processing and Image Understanding*, Jeju, Korea, pp. 66, Feb. 2008.
- [55] Kee Hyon Park, Cheol Hee Lee, and Yeong Ho Ha, "Driving Current Control for RGB LED Backlighting Stabilization," *Korean Society for Imaging Science and Technology*, Incheon, Korea, vol. 28, no. 1, pp. 15-23, Dec. 2007.
- [56] Dong Chang Lee, Oh Seol Kwon, Tae Yong Park, Myong Hee Choi, and Yeong Ho Ha, "Image Mosaicking Using Color-Invariant Values Derived from a Camera Response with Narrow Bands," *Korean Society for Imaging Science and Technology*, Incheon, Korea, vol. 28, no. 1, pp. 69-76, Dec. 2007.
- [57] Kyong Ho Han, Jeong Hoon Song, Dong Hoon Cho, Jae Youl Nam, and Yeong Ho Ha, "Design and Implementation of High Definition Multimedia Demonstration System with Multiple Output," *Korean Society for Imaging Science and Technology*, Incheon, Korea, vol. 28, no. 1, pp. 77-83, Dec. 2007.

- [58] Soo Jin Sung, Chang Hwan Son, Oh Seol Kwon, Kee Hyon Park, and Yeong Ho Ha, "Image Quality Enhancement Algorithm Using a Projector at the Color and Textured Surface," *Proceedings of the 2007 Korea Signal Processing Conference*, Daegu, Korea, vol. 20, no. 1, pp. 82, Oct. 2007.
- [59] Kee Hyon Park and Yeong Ho Ha, "Driving Current Control for Time Stability of RGB LED BLU," *Proceedings of the 2007 Korea Signal Processing Conference*, Daegu, Korea, vol. 20, no. 1, pp. 219, Oct. 2007.
- [60] Dae Geun Park, Kee Hyon Park, Oh Seol Kwon, and Yeong Ho Ha, "Acquisition of Efficient HDR Image Using Estimation of Dynamic Range of Scene in Camera Images with Various Exposures," *Proceedings of IEEK Summer Conference 2007*, Pusan, Korea, pp. 233-234, Jul., 2007
- [61] Dae Geun Park, Kee Hyon Park, Chang Hwan Son, and Yeong Ho Ha, "Reduction Method of Redundant Dynamic Range for Efficient HDR Image Acquisition," *Korean Society for Imaging Science and Technology*, Jeonju, Korea, pp. 60-66, Jun., 2007.
- [62] Oh Seol Kwon, In Su Jang, Chang Hwan Son, and Yeong Ho Ha, "Color Reproduction Based on the Chromatic Adaptation Model in PDP display," *Proceeding of Workshop on 2007 Image Processing and Image Understanding*, Jeju, Korea, pp. 57-60, Feb. 2007.
- [63] Joong Hyun Kim, Chang Hwan Son, and Yeong Ho Ha, "A Method of Photo Ink-Jet Printing for the Reduction of Excessive Colorant Amount," *Proceeding of Workshop on 2007 Image Processing and Image Understanding*, Jeju, Korea, pp. 537-542, Feb. 2007.
- [64] Chang Hwan Son, Oh Seol Kwon, Tae Yong Park, Jae Won Moon, and Yeong Ho Ha, "Color Correction Method in Beam Projector for a Projected Image on Colored Screen, " *Proceedings of IEEK Fall Conference 2006*, Seoul, Korea, vol. 29, no. 2, pp. 659-662, Nov. 2006.
- [65] Joong Hyun Kim, Chang Hwan Son, In Su Jang, Tea Yong Park, and Yeong Ho Ha, "Six Color Separation Based on Total Ink Limit and Dot Visibility for Excessive Colorant Reduction," *Proceedings of IEEK Fall Conference 2006*, Seoul, Korea, vol. 29, no. 2, pp. 655-658, Nov. 2006.
- [66] In Su Jang, Oh Seol Kwon, and Yeong Ho Ha, "PDP Display Characterization Method Based on a Lightness for Input Image," *Korean Society for Imaging Science and Technology*, Seoul, Korea, pp. 90-97, Nov. 2006.
- [67] Chang Hwan Son, In Su Jang, Sung Dae Cho, Chlee Hee Lee, and Yeong Ho Ha, "The Characterization Method of Beam-Projector Considering Colored Screen and Illumination Level, " *Proceedings of the 2006 Korea Signal Processing Conference*, Ansan, Korea, vol. 19, no. 1, pp. 86, Sep. 2006.
- [68] Kyung Woo Ko, Oh Seol Kwon, Chang Hwan Son, and Yeong Ho Ha, "Colorization Algorithm based on Wavelet Packet Sub-bands for Recovering Colors from Gray Image, " *Proceedings of the 2006 Korea Signal Processing Conference*, Ansan, Korea, vol. 19, no. 1, pp. 85, Sep. 2006.
- [69] Oh Seol Kwon, In Su Jang, Kyung Woo Ko, and Yeong Ho Ha, "Color Reproduction Algorithm in FPD Using Chromatic Adaptation, " *Proceedings of the 2006 Korea Signal Processing Conference*, Ansan, Korea, vol. 19, no. 1, pp. 81, Sep. 2006.
- [70] Tae Hyung Lee, Myong Young Lee, Kee Hyon Park, and Yeong Ho Ha, "Color Correction for High Luminance Displays for Human Visual System, " *Proceedings of the 2006 Korea Signal Processing Conference*, Ansan, Korea, vol. 19, no. 1, pp. 80, Sep. 2006.
- [71] Myong Young Lee, Tae Hyung Lee, Cheol Hee Lee, and Yeong Ho Ha, "Physical-Based Photon Mapping Technique for LED Back-Light Lighting Simulator, " *Proceedings of IEEK Summer Conference 2006*, Jeju, Korea, vol. 29, no. 1, pp. 323-324, Jun. 2006.
- [72] Tae Hyung Lee, Myong Young Lee, Kee Hyon Park, and Yeong Ho Ha, "Modeling for Hue Shift Effect of Human Visual System on High Luminance Display, " *Proceedings of IEEK Summer Conference 2006*, Jeju, Korea, vol. 29, no. 1, pp. 307-308, Jun. 2006.

- [73] Kyung Woo Ko, Oh Seol Kwon, Chang Hwan Son, and Yeong Ho Ha, "Recovery of Color from Gray Image Using Wavelet Packet Transform," *Korean Society for Imaging Science and Technology*, Seoul, Korea, pp. 76-83, May 2006.
- [74] In Su Jang, Tea Yong Park, Kee Hyon Park, and Yeong Ho Ha, "Inverse Characterization Method of Hi-fi Printer for Improving Color Tone," *Korean Society for Imaging Science and Technology*, Seoul, Korea, pp. 64-71, May 2006.
- [75] Jong Man Kim, Chang Hwan Son, Kee Hyon Park, Myong Young Lee, and Yeong Ho Ha, "Color Reproduction in Mobile Display for Outdoor Environment," *Proceeding of Workshop on 2006 Image Processing and Image Understanding*, Jeju, Korea, pp. 75-80, Feb. 2006.
- [76] In Su Jang, Chang Hwan Son, Tea Yong Park, Kyung Woo Ko, and Yeong Ho Ha, "Multi-Color Printer Characterization Method based on Correlation of Colorants," *Proceeding of Workshop on 2006 Image Processing and Image Understanding*, Jeju, Korea, pp. 489-494, Feb. 2006.
- [77] Kee Hyon Park, Oh Seol Kwon, Chang Hwan Son, and Yeong Ho Ha, "Color Prediction for Mobile LCD using Improved S-curve model," *Korea Society for Imaging Science and Technology*, Busan, Korea, pp. 166-173, Dec. 2005.
- [78] Myong Young Lee, Yang Ho Cho, Cheol Hee Lee, and Yeong Ho Ha, "Spectral-based Rendering Technique for Lighting simulation," *Proceedings of IEEK Fall Conference 2005*, Seoul, Korea, vol. 28, no. 2, pp. 379-382, Nov. 2005.
- [79] Jong Man Kim, Kee Hyon Park, Myong Young Lee, Yang Ho Cho, and Yeong Ho Ha, "Illuminant-adaptive Color Reproduction for Mobile Display," *Proceedings of the 2005 Korea Signal Processing Conference*, Jeonju, Korea, vol. 18, no. 1, pp. 120, Oct. 2005.
- [80] Kee Hyon Park, Myong Young Lee, Cheol Hee Lee, and Yeong Ho Ha, "Mobile LCD Characterization considering Channel-chromaticity-inconstancy and Channel-dependencefor," *Proceedings of the 2005 Korea Signal Processing Conference*, Jeonju, Korea, vol. 18, no. 1, pp. 119, Oct. 2005.
- [81] Chang Hwan Son, Kee Hyon Park, Cheol Hee Lee, and Yeong Ho Ha, "Implementation of the Color Matching Between Mobile Camera and LCD Based on RGB LUT," *Proceedings of the 2005 Korea Signal Processing Conference*, Jeonju, Korea, vol. 18, no. 1, pp. 118, Oct. 2005.
- [82] Tae Yong Park, Myong Young Lee, Kee Hyon Park, and Yeong Ho Ha, "Threshold Modulation of MJBNM for Banding Artifacts Reduction in Multitoning," *Proceedings of the 2005 Korea Signal Processing Conference*, Jeonju, Korea, vol. 18, no. 1, pp. 80, Oct. 2005.
- [83] In Su Jang, Chang Hwan Son, Tae Yong Park, Kyung Woo Ko, and Yeong Ho Ha, "Colorimetric Characterization Based on Color Correlation in CMYKOG Printer," *Proceedings of the 2005 Korea Signal Processing Conference*, Jeonju, Korea, vol. 18, no. 1, pp. 79, Oct. 2005.
- [84] Oh Seol Kwon, Yang Ho Cho, Myong Young Lee, and Yeong Ho Ha, "High-Fidelity Color Reproduction Using Estimation of Spectral Reflectance and Camera Characteristics," *Korea Society for Imaging Science and Technology*, Daegu, Korea, pp. 9-17, May 2005.
- [85] Chang Hwan Son, Yang Ho Cho, Tae Yong Park, and Yeong Ho Ha, "Six Color Separation Using Additional Colorants and Quantitative Granulrity Metric for Photography Quality," *Korea Society for Imaging Science and Technology*, Daegu, Korea, pp. 41-51, May 2005.
- [86] Chang Hwan Son, Yang Ho Cho, Kee Hyon Park, and Yeong Ho Ha, "Six Color Separation Using Colorant Selection and Metric for Photo Quality Reproduction," *Proceeding of Workshop on 2005 Image Processing and Image Understanding*, Jeju, Korea, pp. 277-282, Jan. 2005.
- [87] Dong Woo Kang, Yun Tae Kim, Yang Ho Cho, and Yeong Ho Ha, "3D-LUT Color Signal Conversion for MPD," *Korea Society for Imaging Science and Technology*, Seoul, Korea, pp. 60-64, Dec. 2004.

- [88] Kyung Woo Ko, Yang Ho Cho, Myong Young Lee, and Yeong Ho Ha, "Preference Color Mapping Method for Skin Regions Based on the Lightness and Color Distribution of the Image," *Korea Society for Imaging Science and Technology*, Seoul, Korea, pp. 56-59, Dec. 2004.
- [89] Jin Kyu Lim, Ick Hwan Kim, Jong Heui Hong, Yeong Ho Ha, and LG Electronics, "System Design and Implementation for Multimedia Play Module with Capture Function," *Proceeding of Korea Multimedia Society*, Ewha Womans University, Korea, Nov. 2004.
- [90] Jong Heui Hong, Young Chul Lim, Jin Kyu Lim, Gi Hoon Jung, Ick Hwan Kim, Jae Seung Choi, Yeong Ho Ha, and Dae Wha Seo, "Display Bridge for HDTV," *Proceedings of the Korean Information Science Society Conference*, Seoul, Korea, vol. 31, no. 2, pp. 394-396, Oct. 2004.
- [91] Jae Hyun Kwon, Yun Tae Kim, Yang Ho Cho, and Yeong Ho Ha, "Color Document Halftoning using Text Enhanced Error Diffusion," *Proceedings of the 2004 Korea Signal Processing Conference*, vol. 17, no. 1, pp. 114, Oct. 2004.
- [92] Dong Woo Kang, Yun Tae Kim, Yang Ho Cho, Won Hee Choe, and Yeong Ho Ha, "3-D LUT Color Signal Decomposition Method for Multi-primary Display," *Proceedings of the 2004 Korea Signal Processing Conference*, vol. 17, no. 1, pp. 120, Oct. 2004.
- [93] Kyung Woo Ko, Yang Ho Cho, Myong Young Lee, and Yeong Ho Ha, "3D Preference Color Mapping Method Based on the Characteristic of Color Distribution," *Proceedings of the 2004 Korea Signal Processing Conference*, vol. 17, no. 1, pp. 121, Oct. 2004.
- [94] Yang Ho Cho, Tae Yong Park, Oh Seol Kwon, and Yeong Ho Ha, "DTV Color Matching Technique for Various Display Devices," *Proceedings of the 2004 Korea Signal Processing Conference*, vol. 17, no. 1, pp. 278, Oct. 2004.
- [95] Hae Bong Im, Yang Ho Cho, Kee Hyon Park, and Yeong Ho Ha, "GOG Model Based on Channel-Independent Inverse Characterization for Color Matching Technique," *Proceedings of IEK Summer Conference 2004*, Cheonan, Korea, vol. 27, no. 1, pp. 949-952, Jun. 2004.
- [96] Ik-Hwan Kim, Kun-Woen Song, and Yeong Ho Ha, "Color Constancy Based on Improved Illumination Using Noise Modeling," *The 10th Color Imaging Workshop*, Daegu, Korea, pp. 69-80, Jun. 2004.
- [97] Chang-Hwan Son, and Yeong Ho Ha, "Six Color Separation Using Lightness Value and Objective Granularity," *The 10th Color Imaging Workshop*, Daegu, Korea, pp. 115-131, Jun. 2004.
- [98] Hae Bong Im, Yang Ho Cho, Myong Young Lee, and Yeong Ho Ha, "Effective Channel-Independent Inverse Characterization Method for Display Devices," *Korean Society for Imaging Science and Technology*, Incheon, Korea, pp. 51-55, May 2004.
- [99] Cheol Hee Lee, and Yeong Ho Ha, "RGB Look-up Table Design for Color Matching Between Monitor and Mobile Display," *Joint Symposium on Color and Imaging*, Samsung Advanced Institute of Technology Yongin, Korea, pp. 51-58, Apr. 2004.
- [100] Oh Seol Kwon, Yang Ho Cho, Yun Tae Kim, and Yeong Ho Ha, "Illumination Estimation Based on Noise Response Modeling of Digital Camera in a Real-World Image," *Proceeding of Workshop on 2004 Image Processing and Image Understanding*, Seoul, Korea, pp. 287-292, Jan. 2004.
- [101] Chang Hwan Son, Yun Tae Kim, Yang Ho Cho, and Yeong Ho Ha, "A Graininess Reduction Method Based on the Quantitative Analysis for Six Color Separation," *Proceeding of Workshop on 2004 Image Processing and Image Understanding*, Seoul, Korea, pp. 435-440, Jan. 2004.
- [102] Tae Yong Park, Yang Ho Cho, Yun Tae Kim, and Yeong Ho Ha, "Multi-level Vector Error Diffusion for Smear Artifact Reduction in the Boundary Regions," *Proceedings of Signal Processing Society, IEK Fall Conference 2003*, Chunan, Korea, pp. 461-464, Nov. 2003.

- [103] Chang Hwan Son, Yun Tae Kim, Yang Ho Cho, and Yeong Ho Ha, "Six Color Separation Using the Color Difference and Granularity," *Proceedings of Signal Processing Society, IEEK Fall Conference 2003*, Chunan, Korea, pp. 245-248, Nov. 2003.
- [104] Ho Keun Lee, Sung Ryoul Cheon, and Yeong Ho Ha, "Stereo Image Insertion Using Alteration of DCT Coefficients of Color Channels," *Proceedings of Signal Processing Society, IEEK Fall Conference 2003*, Chunan, Korea, pp. 175-178, Nov. 2003.
- [105] Kee Hyon Park, Myong Young Lee, Cheol Hee Lee, and Yeong Ho Ha, "Color Matching Between Monitor and Mobile Display Device Using Improved S-curve Model and RGB Color LUT," *Proceedings of Signal Processing Society, IEEK Fall Conference 2003*, Chunan, Korea, pp. 15-18, Nov. 2003.
- [106] Ik Hwan Kim, Jae Seung Choi, Young Cheol Im, Youn Jung Lee, Jae Youl Nam, and Yeong Ho Ha, "Design and Implementation of Additional Multimedia Module for Digital TV," *Proceedings of Signal Processing Society, IEEK Fall Conference 2003*, Chunan, Korea, pp. 513-516, Nov. 2003.
- [107] Kee Hyon Park, Cheol Hee Lee, and Yeong Ho Ha, "Color Matching Between Monitor and Mobile Display Device Using RGB Color Look-up Table," *Korean Society for Imaging Science and Technology*, Busan, Korea, pp. 70-75, Nov. 2003.
- [108] Oh Seol Kwon, Yang Ho Cho, Yun Tae Kim, and Yeong Ho Ha, "Illumination Estimation Based on Valid Pixel Selection from CCD Camera Response," *Korean Society for Imaging Science and Technology*, Busan, Korea, pp. 55-60, Nov. 2003.
- [109] Jae Seung Choi, Kee Hun Jung, Jong Hee Hong, Ik Hwan Kim, Jin Kyu Im, and Yeong Ho Ha, "Design and Implementation of IDE Type Memory Card Interface Architecture for Digital TV," *Korean Society for Imaging Science and Technology*, Busan, Korea, pp. 51-54, Nov. 2003.
- [110] Chang Hwan Son, Yun Tae Kim, Cheol Hee Lee, and Yeong Ho Ha, "Six Color Separation for Improving Graininess in a Middle Tone Region," *The 4th Korea-Japan Joint Symposium on Imaging Materials and Technologies*, Busan, Korea, pp. 5-16, Nov. 2003.
- [111] Kee Hyon Park, Myong Young Lee, Cheol Hee Lee, and Yeong Ho Ha, "LCD Characterization Using Modified S-Curve Model and Color Matching Between Display Devices," *Proceeding of the 2003 Korean Signal Processing Conference*, Choonchun, Korea, vol. 16, no. 1, pp. 27, Sep. 2003.
- [112] Oh Seol Kwon, Yang Ho Cho, Yun Tae Kim, and Yeong Ho Ha, "Estimation of Illuminant Chromaticity in Real-World Image Based on CCD Camera Response Distribution," *Proceeding of the 2003 Korean Signal Processing Conference*, Choonchun, Korea, vol. 16, no. 1, pp. 26, Sep. 2003.
- [113] Chang Hwan Son, Yun Tae Kim, Yang Ho Cho, and Yeong Ho Ha, "Six-Color Separation for Improving Graininess in a Middle Tone Region," *Proceeding of the 2003 Korean Signal Processing Conference*, Choonchun, Korea, vol. 16, no. 1, pp. 25, Sep. 2003.
- [114] Yeong Ho Ha, "Recent Trends in Color and Image," *Summer Academy Color and Image 2003*, Cheju, Korea, pp. 2-8, Jul. 2003.
- [115] Ho Keun Lee, Yun Tae Kim, Ju Won Kim, and Yeong Ho Ha, "Wavelet-Compressed Image Improvement Method Using Modification of Wavelet Coefficients," *Proceedings of IEEK Summer Conference 2003*, Pyungchang, Korea, pp. 1875-1878, Jul. 2003.
- [116] Oh Seol Kwon, Cheol Hee Lee, Ho Keun Lee, and Yeong Ho Ha, "Spectral-Reflectance Estimation Using Adaptive Principal Component Analysis in Similar Color Region," *Proceedings of IEEK Summer Conference 2003*, Pyungchang, Korea, pp. 1767-1770, Jul. 2003.
- [117] Yun Tae Kim, Yang Ho Cho, Ho Keun Lee, and Yeong Ho Ha, "Color Look-Up Table for Multi-Function Printer," *Proceedings of IEEK Summer Conference 2003*, Pyungchang, Korea, pp. 1759-1762, Jul. 2003.



- [118] Tae Yong Park, Myong Young Lee, Yang Ho Cho, and Yeong Ho Ha, "Fast Multilevel Vector Error Diffusion Based on Adaptive Selection of Patch," *Proceedings of IEEK Summer Conference 2003, Pyungchang*, Korea, pp. 1747-1750, Jul. 2003.
- [119] Cheol Hee Lee, Oh Seol Kwon, and Yeong Ho Ha, "Improved Spectral-Reflectance (SR) Estimation Using Set of Principle Components Separately Organized for Each SR Population with Similar SRs," *The 9th Color Imaging Workshop*, Daegu, Korea, pp. 91-102, Jun. 2003.
- [120] Yun Tae Kim, and Yeong Ho Ha, "Color Look-Up Table for Color Reproduction Combining Variable Anchor Point Gamut Mapping Method and Color Space Conversion," *The 9th Color Imaging Workshop*, Daegu, Korea, pp. 29-40, Jun. 2003.
- [121] Yun Tae Kim, Yang Ho Cho, Ho Keun Lee, and Yeong Ho Ha, "Color Look-Up Table Design for Color Reproduction Combining Variable Anchor Points Gamut Mapping Method and Color Space Conversion," *Korean Society for Imaging Science and Technology*, Seoul, Korea, pp. 64, May 2003.
- [122] Cheol Hee Lee and Yeong Ho Ha, "Spectral Reflectance Estimation Using Set of Principle Components Based on Spectrum Disparity," *The 1st Symposium on Color and Imaging*, Daegu, Korea, pp. 53-56, Mar. 2003.
- [123] Yun Tae Kim, Ho Keun Lee, Yang Ho Cho, and Yeong Ho Ha, "Color Look-Up Table Design for Gamut Mapping and Color Space Conversion," *Proceeding of Workshop on 2003 Image Processing and Image Understanding*, Cheju, Korea, pp. 419-424, Jan. 2003.
- [124] Ho Keun Lee, Yun Tae Kim, Yang Ho Cho, and Yeong Ho Ha, "Stereo Image Transmission Using Concealment of Disparity Information," *Proceeding of Workshop on 2003 Image Processing and Image Understanding*, Cheju, Korea, pp. 173-176, Jan. 2003.
- [125] Soon Chang Lee, Yun Tae Kim, Cheol Hee Lee, and Yeong Ho Ha, "Improved Vector Error Diffusion for Reduction of Smear Artifact in the Boundary Region," *Korean Society for Imaging Science and Technology*, Jeonju, Korea, pp. 7-11, Nov. 2002.
- [126] Ho Keun Lee, Yun Tae Kim, Kyu Phil Han, and Yeong Ho Ha, "Compatible 3D Image Transmission with 2D Image," *Proceeding of the 2002 Korean Signal Processing Conference*, Seoul, Korea, vol. 15, no. 1, pp. 7, Sep. 2002.
- [127] Sung Leol Chyun, Ik Hwan Kim, Ho Keun Lee, and Yeong Ho Ha, "An Adaptive Control of Digital TV Input Signal Using Sync Shaping," *Proceeding of the 2002 Korean Signal Processing Conference*, Seoul, Korea, vol. 15, no. 1, pp. 240, Sep. 2002.
- [128] Soon Chang Lee, Yun Tae Kim, Cheol Hee Lee, and Yeong Ho Ha, "Vector Error Diffusion for Improvements of Image Quality and Boundary Artifact Reduction," *Proceeding of the 2002 Korean Signal Processing Conference*, Seoul, Korea, vol. 15, no. 1, pp. 3, Sep. 2002.
- [129] Cheol Hwan Kim, Ho Keun Lee, and Yeong Ho Ha, "Fast and Robust Stereo Matching in the Disparity Space Image," *Proceeding of the 2002 Korean Signal Processing Conference*, Seoul, Korea, vol. 15, no. 1, pp. 105, Sep. 2002.
- [130] Myong Young Lee, Ho Keun Lee, and Yeong Ho Ha, "Simulation of Rear Lamp Using Spectral-Based Ray Tracing," *The 8th Color Imaging Workshop*, Daegu, Korea, pp. 99-108, Jun. 2002.
- [131] Yang Ho Cho, Yun Tae Kim, and Yeong Ho Ha, "Gamut Mapping Based on Color Space Division for Enhancement of Lightness Contrast and Chrominance," *The 8th Color Imaging Workshop*, Daegu, Korea, pp. 45-58, Jun. 2002.
- [132] Joo Won Kim, Dae Wha Seo, Myong Hee Choi, and Yeong Ho Ha, "Embedded Linux Porting on TV System," *Proceedings of IEEK Summer Conference 2002*, Wheongsung, Korea, pp. 231-234, Jun. 2002.

- [133] Myong Young Lee, Cheol Hee Lee, Ho Keun Lee, and Yeong Ho Ha, "Simulation of Rear Lamp using Spectral-Based Ray Tracing," *Proceedings of IEEK Summer Conference 2002*, Wheongsung, Korea, pp. 327-330, Jun. 2002.
- [134] Myong Hee Choi, Ho Keun Lee, Joo Won Kim, and Yeong Ho Ha, "An Efficient Edge Detection Using Van der Waerden's Statistic in Images," *Proceedings of IEEK Summer Conference 2002*, Wheongsung, Korea, pp. 215-218, Jun. 2002.
- [135] Myong Young Lee, Yun Tae Kim, Yang Ho Cho, and Yeong Ho Ha, "Reproduction of Realistic Image Using Spectral-Based Ray Tracing Method," *Korean Society for Imaging Science and Technology*, Ansan, Korea, pp. 89-92, May 2002.
- [136] Yang Ho Cho, Ho Keun Lee, Yun Tae Kim, and Yeong Ho Ha, "Color Image Enhancement Technique Using Gamut Mapping Based on Color Space Division," *Proceeding of Workshop on 2002 Image Processing and Image Understanding*, Cheju, Korea, pp. 315-320, Jan. 2002.
- [137] Oh Ju Kwon, Yeong Ho Ha, "PAPR Reduction Algorithm of Adaptive Suboptimal PTS," *Proceeding of the 2001 Korea Signal Processing Cconference*, Chonnam, Korea, pp. 609-612, Sep. 2001.
- [138] Jae Min Shin, Ho Keun Lee, Ho Young Lee, and Yeong Ho Ha, "Windowed Wavelet-Based Stereo Matching Using Shiftability," *Proceeding of the 2001 Korea Signal Processing Cconference*, Chonnam, Korea, pp. 665-668, Sep. 2001.
- [139] Yang Ho Cho, Yun Tae Kim, Cheol Hee Lee, and Yeong Ho Ha, "Circular Shape-Based Gamut Mapping for Enhancement of Lightness Contrast and Chrominance," *Proceeding of the 2001 Korea Signal Processing Cconference*, Chonnam, Korea, pp. 677-680, Sep. 2001.
- [140] Hyun Woo Kim, Ho Keun Lee, Hee Soo Kim, and Yeong Ho Ha, "Digital Watermaking of EZW Coded Image in the Compressed Domain," *Proceeding of the 2001 Korea Signal Processing Cconference*, Chonnam, Korea, pp. 681-684, Sep. 2001.
- [141] Yong Sung Kwon, Yun Tae Kim, Ho Keun Lee, and Yeong Ho Ha, "Modified Jointly-Blue Noise Mask Using S-CIELAB Color Difference," *Proceedings of 2001 KICS Summer conference*, Cheju, Korea, pp. 2264-2267, Jul. 2001.
- [142] Cheol Hee Lee, Suk Chul Ahn, and Yeong Ho Ha, "Advancement of Estimation Error of Surface Spectral Reflectance Using a Population Update," *The 7th Color Imaging Workshop*, Daegu, Korea, pp. 59-78, Jun. 2001
- [143] Yong Sung Kwon, Yun Tae Kim, Ho Keun Lee, and Yeong Ho Ha, "Modified Jointly-Blue Noise Mask Using S-CIELAB Color Difference," *The 7th Color Imaging Workshop*, Daegu, Korea, pp. 35-46, Jun. 2001.
- [144] Yun Tae Kim, Jeong Yeop Kim, Ho Keun Lee, and Yeong Ho Ha, "Estimation of Spectral Distribution of Scene Illumination Using Perceived Illumination and Highlight from a Single Color Image," *The 7th Color Imaging Workshop*, Daegu, Korea, pp. 25-33, Jun. 2001.
- [145] Cheol Hee Lee and Yeong Ho Ha, "Color Appearance Estimation of Nighttime Road Images Under Automotive Headlamp Lights," *The 7th Color Imaging Workshop*, Daegu, Korea, pp. 3-23, Jun. 2001.
- [146] Yun Tae Kim, Jeong Yeop Kim, Ho Keun Lee, and Yeong Ho Ha, "Estimation of Illuminant Chromaticity from Single Color Image Using Perceived Illumination and Highlight," *Korean Society for Imaging Science and Technology*, Suwon, Korea, pp. 45-58, May 2001.
- [147] Jeong Yeop Kim, Hee Soo Kim, Ho young Lee, and Yeong Ho Ha, "Perceived Illumination and Highlight Based Illuminant Chromaticity Estimation from Single Color Image," *Proceeding of Workshop on 2001 Image Processing and Understanding*, Cheju, Korea, pp.469-474, Jan. 2001.

- [148] Eui Yoon Chung, Jeong Yeop Kim, Ho Young Lee, and Yeong Ho Ha, "Human Object Segmentation Using Facial Feature for Object-based Coding," *Proceeding of Workshop on 2001 Image Processing and Understanding*, Cheju, Korea, pp.431-436, Jan. 2001.
- [149] Cheol Hee Lee and Yeong Ho Ha, "A Reproduction Algorithm of Nighttime Road-Image for Visibility Evaluation of Headlamps," *IEEK Fall Conference 2000*, Ansan, Korea, pp. 69-72, Nov. 2000.
- [150] Yong Gi Kim, Ho Young Lee, Hee Soo Kim, and Yeong Ho Ha, "Effect of Ambient Light Source for the Appearance of Color Image on CRT Monitor," *Korean Society for Imaging Science and Technology*, Daegu, Korea, pp. 64-72, Nov. 2000.
- [151] Kyeong Man Kim, Hee Soo Kim, and Yeong Ho Ha, "Natural Color Reproduction of an Image with Highlights by Vector Transformation and Non-linear Mapping," *The 6th Color Imaging Workshop*, Daegu, Korea, pp. 81-103, Nov. 2000.
- [152] Jeong-Yeop Kim, Yeong Ho Ha, and Yang Seok Seo, "Estimation of Illuminant Chromaticity from Single Color Image Using Perceived Illumination and Highlight," *The 6th Color Imaging Workshop*, Daegu, Korea, pp. 65-80, Nov. 2000.
- [153] Yong-Gi, Yeong Ho Ha, Jong Tae Lee, Byung Deok Nam, and Byung-Joon Moon, "Effect of Ambient Light Source for the Appearance of Color Image on CRT Monitor," *The 6th Color Imaging Workshop*, Daegu, Korea, pp. 33-43, Nov. 2000.
- [154] Yong Gi Kim, Jeong Yeop Kim, Hee Soo Kim, and Yeong Ho Ha, "Color Reproduction in CRT Monitor Considered Effect of Ambient Light," *Proceeding of the 2000 Korean Signal Processing Conference*, Seoul, Korea, vol. 13, no. 1, pp. 411-414, Sep. 2000.
- [155] Hee Soo Kim, Ho Young Lee, Hyung Suk Kim, and Yeong Ho Ha, "Robust Digital Watermarking for Image Compression," *Proceeding of the 2000 Korean Signal Processing Conference*, Seoul, Korea, vol. 13, no. 1, pp. 701-704, Sep. 2000.
- [156] Jae Chul Kim, Ho Keun Lee, Sun Kyu Kwon, Hee Soo Kim, and Yeong Ho Ha, "Hierarchical Stereo Matching Using Window Warping Technique," *Proceeding of the 2000 Korean Signal Processing Conference*, Seoul, Korea, vol. 13, no. 1, pp. 663-666, Sep. 2000.
- [157] Hong Yan Jin, Ho Young Lee, Hee Soo Kim, and Yeong Ho Ha, "Content-based Image Retrieval Using Color Adjacency and Gradient," *Proceedings of IEEK Summer Conference 2000*, Kwangju, Korea, vol. 23, no. 1, pp. 157-160, Jun. 2000.
- [158] Yun Tae Kim, Jeong Yeop Kim, Hee Soo Kim, and Yeong Ho Ha, "Halftoning Method for Color Image by CMY Printing of Achromatic Region," *Korean Society for Imaging Science and Technology*, Taejon, Korea, pp. 111-116, May 2000.
- [159] Tae Min Bae, Sun Kyu Kwon, Ho Keun Lee, and Yeong Ho Ha, "Intermediate Viewpoints Synthesis Using Stereo Image," *Korean Society for Imaging Science and Technology*, Taejon, Korea, pp. 102-110, May 2000.
- [160] Hee Soo Kim, Tae Min Bae, Jin Woo Park, and Yeong Ho Ha, "Digital Watermarking Using Color Information," *Information Security for Multimedia Content*, Seoul, Korea, pp. 251-254, Apr. 2000.
- [161] Cheol Hee Lee, Hee Soo Kim, Gi Seok Kim, and Yeong Ho Ha, "Color Space Conversion Using Uniform Color Samples for Printer Gamut," *Proceeding of Workshop on 2000 Image Processing and Understanding*, Cheju, Korea, pp. 206-210, Jan. 2000.
- [162] Jin Woo Park, Eui Yoon Chung, Hee Soo Kim, Kun Woen Song, and Yeong Ho Ha, "Video Image Segmentation Based on Color Histogram and Change Detector," *Proceedings of 1999 KICS Fall Conference*, Suwon, Korea, pp.1093-1096, Nov. 1999.

- [163] Tae Min Bae, Sun Kyu Kwon, Hee Soo Kim, and Yeong Ho Ha, "Intermediate Viewpoint Synthesis Using Trilinearity of Stereo Image," *Proceedings of 1999 KICS Fall Conference*, Suwon, Korea, pp.1555-1558, Nov. 1999.
- [164] Eui Yoon Chung, Ho Young Lee, Jin Woo Park, and Yeong Ho Ha, "Improved changed region extraction for Object-based Image Segmentation," *Proceeding of Korean Society for Imaging Science and Technology Conference*, Seoul, Korea, pp.106-111, Nov. 1999.
- [165] Jeong Hoon Lee, Cheol Hee Lee, Ho Young Lee, and Yeong Ho Ha, "Effective Illumination Estimation and Color Recovery," *Proceeding of the 1999 Korean Signal Processing Conference*, Pohang, Korea, pp.675-678, Oct. 1999.
- [166] Ho Keun Lee, Tae Min Bae, Sun Kyu Kwon, and Yeong Ho Ha, "Feature-based 3D Modeling Using Stereoscopic Image Sequence," *Proceeding of the 1999 Korean Signal Processing Conference*, Pohang, Korea, pp.593-596, Oct. 1999.
- [167] Tae Jun Kang, Jin Woo Park, Eui Yoon Chung, and Yeong Ho Ha, "Design of an Efficient VLSI Architecture of SA-DCT Based on Systolic Array," *Proceeding of the 1999 Korean Signal Processing Conference*, Pohang, Korea, pp.403-406, Oct. 1999.
- [168] Eui Yoon Chung, Hee Soo Kim, Hyung Suk Kim, and Yeong Ho Ha, "Object Segmentation for Object-based Coding Using Skin Color and Motion," *Proceedings of 1999 KICS Summer Conference*, Yangyang, Korea, pp. 757-760, Jul. 1999.
- [169] Weon Hee Choi, Cheol Hee Lee, Ho Young Lee, and Yeong Ho Ha, "BNM halftoning Method for Minimization of the Color Difference," *Proceedings of 1999 KICS Summer Conference*, pp. 15-18, Yangyang, Korea, Jul. 1999.
- [170] Kyu Phil Han, Tae Min Bae, Sun Kyu Kwon, and Yeong Ho Ha, "A New Stereo Matching Using Compact Genetic Algorithm," *Proceedings of 1999 KITE Summer Conference*, Mokpo, Korea, pp.474-477, Jun. 1999.
- [171] Yeong Ho Ha, "Color Imaging Quantization and Dithering Method Based on HVS Characteristics," *Proceedings of 1999 KITE Summer Conference*, Mokpo, Korea, pp.569-574, Jun. 1999.
- [172] Sun Kyu Kwon, Tae Min Bae, Jin Woo Park, and Yeong Ho Ha, "Object Extraction for Object Based Stereoscopic Imaging Coding," *Proceedings of 1999 KITE Summer Conference*, Mokpo, Korea, pp.189-193, Jun. 1999.
- [173] Cheol Hee Lee, Eui Yoon Chung, and Yeong Ho Ha, "Tone Reproduction Technique Using Neural and Sigmoid Function in Printer and Monitor," *The 5th Color Imaging Workshop*, Daegu, Korea, pp.117-127, May 1999.
- [174] Ho Young Lee, Jin Woo Park, Tae Min Bae, and Yeong Ho Ha, "Efficiency Scan Conversion Using HSV Characteristic," *Proceeding of Korean Society for Imaging Science*, Deagu, Korea, pp.71-81, May 1999.
- [175] Eui Yoon Chung, Kyu Phil Han, Gi Seok Kim, and Yeong Ho Ha, "Object segmentation for Object-based Coding Using Color and Motion," *Proceeding of Workshop on 1999 Image Processing and Image Understanding*, Taejon, Korea, pp. 130-133, Feb. 1999.
- [176] Tae Min Bae, Dong Hyun Kwon, Kyu Phil Han, and Yeong Ho Ha, "Stereo Sequence Coding Using MPEG-2 MVP," *Proceedings of IEEK Fall Conference'98*, Daegu, Korea, pp.143-146, Nov. 1998.
- [177] Chae Soo Lee, Cheol Hee Lee, and Yeong Ho Ha, "Parametric Gamut Mapping Using Variable Anchor Points of Constant Slope," *Proceeding of the 1998 Korean Signal Processing Conference*, Seoul, Korea, pp. 973-976, Oct. 1998.
- [178] Kyu Phil Han, Tae Min Bae, Eui Yoon Chung, Kyeong Hoon Do, and Yeong Ho Ha, "A Compact Stereo Matching Algorithm Using Population-based Incremental Learning," *Proceeding of the 1998 Korean Signal Processing Conference*, Seoul, Korea, pp. 911-914, Oct. 1998.

- [179] Hee Soo Kim, Ho Young Lee, Jin Woo Park, and Yeong Ho Ha, "Image Interpolation Using Fourier Descriptor Characteristics," *Proceeding of the 1998 Korean Signal Processing Conference*, Seoul, Korea, pp. 25-28, Oct. 1998.
- [180] Jae Min Lee, Kyeong Man Kim, Cheol Hee Lee, Chae Soo Lee, and Yeong Ho Ha "Model-based Color Image halftoning Method Using Dot-Pattern Databases," *The Fourth Color Imaging Workshop*, Daegu, Korea, pp. 15-24, Jul. 1998.
- [181] Sang Yeol Lee, Kun Woen Song, Sang Um Choi, Ho Young Lee, and Yeong Ho Ha, "A VLSI Architecture Design of Morphological Reconstruction Filter Using Memory Partition," *Proceedings of 1998 KICS Summer Conference*, Kyongsan, Korea, pp.427-430, Jul. 1998.
- [182] Jae Min Lee, Kyeong Man Kim, Cheol Hee Lee, Chae Soo Lee, and Yeong Ho Ha, "Dot Pattern Selection Halftoning Method Using Circular Dot-Overlap Model and Contrast Sensitivity Function," *Proceedings of 1998 KICS Summer Conference*, Kyongsan, Korea, pp. 419-422, Jul. 1998.
- [183] Hyung Suk Kim, Jin Woo Park, Eui Yoon Chung, Hee Soo Kim, and Yeong Ho Ha, "Simplification of 3D Objects Using Nonuniform Subdivision Vertex Clustering," *Proceedings of 1998 KICS Summer Conference*, Kyongsan, Korea, pp. 403-406, Jul. 1998.
- [184] Sun Kyu Kwon, Tae Min Bae, Kyu Phil Han, and Yeong Ho Ha, "Object-based Stereo Sequence Coding," *Proceedings of 1998 KITE Summer Conference*, Masan, Korea, pp. 681-684, Jun. 1998.
- [185] Young Sik Park, Kun Woen Song, Kyu Phil Han, Ho Young Lee, and Yeong Ho Ha, "A Hierarchical Video Segmentation Using a Binary Split Algorithm," *Proceeding of Workshop on 1998 Image Processing and Understanding*, Cheju, Korea, pp. 135-139, Jan. 1998.
- [186] Chae Soo Lee, Kyeong Man Kim, Cheol Hee Lee, and Yeong Ho Ha, "Color Printing Using Expanded Nonlinear Quantization and Color Gamut Mapping for Visual Color Constancy," *Proceeding of Korean Society for Emotion and Sensibility*, Seoul, Korea, pp. 146-151, Nov. 1997.
- [187] Young Sik Park, Kun Woen Song, Eui Yoon Chung, Kyu Phil Han, and Yeong Ho Ha, "Spatio-Temporal Image Segmentation Using Hierarchical Structure Based on Binary Split Algorithm," *Proceeding of Korea Institute of Broadcasting Science Conference'97*, Seoul, Korea, pp. 145-149, Nov. 1997.
- [188] Kun Woen Song, Young Sik Park, Kyu Phil Han, Eui Yoon Chung, and Yeong Ho Ha, "Hierarchical Image Segmentation Based on HVS Characteristics for Efficient Region Based Coding," *Proceedings of 1997 KICS Fall Conference*, Seoul, Korea, pp. 1145-1148, Nov. 1997.
- [189] Eui Yoon Chung, Kun Woen Song, Kyeong Man Kim, Young Sik Park, and Yeong Ho Ha, "Image Analysis Using Skin Color and Motion for Object-based Coding," *Proceedings of 1997 KICS Fall Conference*, Seoul, Korea, pp. 1137-1140, Nov. 1997.
- [190] Kyu Phil Han, Yong Suk Kim, Kun Woen Song, Young Sik Park, and Yeong Ho Ha, "Generalized Genetic Algorithm for Stereo Matching," *Proceedings of 1997 KITE Fall Conference*, Yongin, Korea, pp. 935-938, Nov. 1997.
- [191] Hyun Sik Ahn, Chin Tae Choi, Kwan Hee Lee, Ki Tae Shin, and Yeong Ho Ha, "An Application of a Range Finding Vision System for Autonomous Material Handling," *Proceedings of 1997 KITE Fall Conference*, Yongin, Korea, pp. 927-930, Nov. 1997.
- [192] Yang Woo Park, Tae Uk Uam, Chu Seok Chang, and Yeong Ho Ha, "Digital Halftoning Technique Based On the Fuzzy Relation Algorithm," *Proceedings of 1997 KITE Fall Conference*, Yongin, Korea, pp. 855-858, Nov. 1997.
- [193] Jin Woo Park, Young Sik Park, Kun Woen Song, Jae Yeal Nam, and Yeong Ho Ha, "3D Object Compression Based on Adaptive Bit Allocation and DFSVQ," *Proceeding of the 1997 Korean Signal Processing Conference*, Pusan, Korea, vol.10, No.1, pp. 145-148, Sep. 1997.

- [194] In Hwa Choi, Kun Woen Song, Eui Yoon Chung, Kyu Phil Han, and Yeong Ho Ha, "The Design of Efficient VLSI Architecture of Morphological Operator," *Proceeding of the 1997 Korean Signal Processing Conference*, Pusan, Korea, vol.10, No.1, pp. 451-454, Sep. 1997.
- [195] Shin Dong Kim, Kyeong Man Kim, Chae Soo Lee, Cheol Hee Lee, and Yeong Ho Ha, "Image Dependent Gamut Mapping Using the Variable Anchor Point Based on the Change of Lightness," *Proceeding of the 1997 Korean Signal Processing Conference*, Pusan, Korea, vol.10, No.1, pp. 131-134, Sep. 1997.
- [196] Tae Min Bae, Kyu Phil Han, Yong Suk Kim, Ho Young Lee, and Yeong Ho Ha, "Multiresolution Block-Based Stereo Sequence Coding," *Proceedings of 1997 KICS Summer Conference*, pp. 420-423, Jul. 1997
- [197] Cheol Hee Lee and Yeong Ho Ha, "Color Matching for Different Substrates," *The 3rd IEEE Color Imaging Workshop*, Daegu, Korea, pp. 29-40, Jul. 1997.
- [198] Yong Suk Kim, Kyu Phil Han, and Yeong Ho Ha, "3D Depth Estimation Using Genetic Algorithm in Stereo Image Pairs," *Proceeding of Workshop on 1997 Artificial Intelligent, Neural Network, and Fuzzy System*, pp. 161-166, Jun. 1997.
- [199] Gi Seok Kim, Young Sik Park, Kun Woen Song, and Yeong Ho Ha, "Very Low Bit Rate Video Coding Using Adaptive Contour Processing," *Proceeding of Workshop on 1997 Image Processing and Understanding*, Kyongju, Korea, pp. 310-314, Jan. 1997.
- [200] Kyeong Man Kim, Chae Soo Lee, Young Sik Park, and Yeong Ho Ha, "Color Image Enhancement Using Vector Rotation Based on Color Constancy," *Proceeding of Korea Institute of Broadcasting Science Conference'96*, Seoul, Korea, pp. 181-185, Dec. 1996.
- [201] Kun Woen Song, Gi Seok Kim, Young Sik Park, and Yeong Ho Ha, "Hierarchical Image Segmentation Using Contrast Difference of Neighbor Regions for Very Low Bit Rate Coding," *Proceeding of Korea Institute of Broadcasting Science Conference'96*, Seoul, Korea, pp. 175-180, Dec. 1996.
- [202] Kyu Phil Han, Yong Suk Kim, Gi Seok Kim, and Yeong Ho Ha, "New Relaxation Algorithm Based on Fussy Measure to Solve Correspondence Problems," *Proceedings of 1996 KITE Fall Conference*, Seoul, Korea, pp. 1647-1650, Nov. 1996.
- [203] Chae Soo Lee, Kyeong Man Kim, Young Sik Park, and Yeong Ho Ha, "Adaptive Dithering Based on Spectral Analysis for Color Printing," *Proceedings of 1996 KITE Fall Conference*, Seoul, Korea, pp. 1135-1138, Nov. 1996.
- [204] Young Sik Park, Gi Seok Kim, Kun Woen Song, and Yeong Ho Ha, "Regional Hierarchical Segmentation Based on PSNR for Low Bit Rate Coding," *Proceeding of Korea Institute of Imaging Science Conference'96*, Pusan, Korea, pp. 70-73, Nov. 1996.
- [205] Chae Soo Lee, Kyeong Man Kim, and Yeong Ho Ha, "Color Quantization and Dithering Method Based on HVS Characteristics," *Proceeding of Korea Institute of Imaging Science Conference '96*, Pusan, Korea, pp. 34-38, Nov. 1996.
- [206] Young Sik Park, Gi Seok Kim, Kun Woen Song, and Yeong Ho Ha, "Regional Hierarchical Segmentation Based on PSNR for Low Bit Rate Coding," *Proceeding of the 1996 Korean Signal Processing Conference*, Suwon, Korea, vol. 2, pp. 1313-1316, Oct. 1996.
- [207] Gi Seok Kim, Young Sik Park, Kun Woen Song, and Yeong Ho Ha, "Very Low Bit rate Image Coding Using Adaptive Shape Representation," *Proceeding of the 1996 Korean Signal Processing Conference*, Suwon, Korea, vol. 2, pp. 1309-1312, Oct. 1996.
- [208] Yeong Zun Yeo, Gi Seok Kim, Kun Woen Song, and Yeong Ho Ha, "Hierarchical 3D Segmentation of Image Sequence Using Motion Information Based on Mathematical Morphology," *Proceeding of the 1996 Korean Signal Processing Conference*, Suwon, Korea, vol. 2, pp. 1121-1124, Oct. 1996.

- [209] Tae Uk Uam, Kyeong Man Kim, Yang Woo Park, and Yeong Ho Ha, "The New Iterative Image Segmentation Algorithm Using by Fuzzy Relaxation," *Proceeding of the 1996 Korean Signal Processing Conference*, Suwon, Korea, vol. 2, pp. 1105-1108, Oct. 1996.
- [210] Ho Young Lee, Young Sik Park, Jae Yeal Nam, and Yeong Ho Ha, "Scene Change Adaptive Bit Rate Control Using Local Variance," *Proceeding of the 1996 Korean Signal Processing Conference*, Suwon, Korea, vol. 2, pp. 1033-1036, Oct. 1996.
- [211] Eui Yoon Chung, Young Sik Park, Gi Seok Kim, and Yeong Ho Ha, "Improved Changed Region Detection and Motion Estimation for Object-Oriented Coding," *Proceeding of the 1996 Korean Signal Processing Conference*, Suwon, Korea, vol. 2, pp. 987-990, Oct. 1996.
- [212] Kyeong Man Kim, Chae Soo Lee, Yang Woo Park, and Yeong Ho Ha, "Color Image Enhancement Using Linear Vector Process Based on Color Constancy," *Proceeding of the 1996 Korean Signal Processing Conference*, Suwon, Korea, vol.2, pp. 735-768, Oct. 1996.
- [213] Cheol Hee Lee, Kyeong Man Kim, Yang Woo Park, and Yeong Ho Ha, "Color Matching Using Dot Gain and Intensity Compensation for Different Substrates," *Proceeding of the 1996 Korean Signal Processing Conference*, Suwon, Korea, vol.1, pp. 513-516, Oct. 1996.
- [214] Yong Suk Kim, Kyu Phil Han, In Gab Jeong, and Yeong Ho Ha, "Depth Estimation Using Genetic Algorithm in Stereo Image Pairs," *Proceeding of the 1996 Korean Signal Processing Conference*, Suwon, Korea, vol.1, pp. 513-516, Oct. 1996.
- [215] In Gab Jeong, Yong Suk Kim, Ki Ho Hyun, and Yeong Ho Ha, "Range Image Segmentation and Classification Using Cooperative Algorithm Between Curvature," *Proceeding of the 1996 Korean Signal Processing Conference*, Suwon, Korea, vol.1, pp. 343-346, Oct. 1996.
- [216] Chae Soo Lee, Kyeong Man Kim, and Yeong Ho Ha, "Color Palette Design And Dithering," *The 2nd Color Imaging Workshop*, Daegu, Korea, pp. 109-116, Jun. 1996.
- [217] Kyeong Man Kim, Kun Woen Song, Eung Joo Lee, and Yeong Ho Ha, "Hierarchical Color Image Quantization Using Color Activity Weighted-Distortion Measure and Image Segmentation by Color Palette," *Proceeding of Workshop on 1996 Image Processing and Understanding*, Pusan, Korea, pp. 49-53, Jan. 1996.
- [218] Young Sik Park, Yong Suk Kim, Jin Soo Choi, and Yeong Ho Ha, "Object Contour Extraction Scheme by Tracking Algorithm," *Proceeding of Workshop on 1996 Image Processing and Understanding*, Pusan, Korea, pp. 185-188, Jan. 1996.
- [219] Yang Woo Park, Eung Joo Lee, Yeong Zun Yeo, Tae Uk Uam, and Yeong Ho Ha, "Color Image Quantization Using Local Area Block on 3D Histogram," *Proceedings of KITE Fall Conference*, pp. 910-913, Nov. 1995.
- [220] Eung Joo Lee, Kyeong Man Kim, Yang Woo Park, In Gab Jeong, and Yeong Ho Ha, "Color Enhancement of TB Picture Using Optical Sensor," *Proceeding of Korea Institute of Broadcasting Science Conference'95*, Seoul, Korea, pp. 69-74, Nov. 1995.
- [221] Yang Woo Park, Eung Joo Lee, Gi Seok Kim, In Gab Jeong, and Yeong Ho Ha, "Color Image Quantization Using Local Region Block in RGB Space," *Proceeding of Korea Institute of Broadcasting Science Conference'95*, Seoul, Korea, pp. 83-86, Nov. 1995.
- [222] Chae Soo Lee, Kyeong Man Kim, Eung Joo Lee, and Yeong Ho Ha, "Nonlinear Quantization and Modified Dot Diffusion for Color Printing," *Proceeding of the 1995 Korean Signal Processing Conference*, pp. 842-846, Sep. 1995.
- [223] Yong Suk Kim, Kyeong Hoon Do, Young Sik Park, and Yeong Ho Ha, "Image Segmentation Using Disparity Information Obtained by Stereo Matching," *Proceeding of the 1995 Korean Signal Processing Conference*, pp. 1112-1117, Sep. 1995.

- [224] Han Kyu Lee, Jae Yeal Nam, Jin Soo Choi, and Yeong Ho Ha, "An Efficient VLSI Architecture with Serial Input Parallel Processing for Motion Estimation," *Proceeding of the 1995 Korean Signal Processing Conference*, pp. 584-587, Sep. 1995.
- [225] Gi Seok Kim, Kun Woen Song, Yong Suk Kim, and Yeong Ho Ha, "Separation of Overlapping Particles Based on Mathematical Morphology," *Proceeding of the 1995 Korean Signal Processing Conference*, pp. 516-520, Sep. 1995.
- [226] Kun Woen Song, Gi Seok Kim, Yang Woo Park, and Yeong Ho Ha, "Recognition of Occluded Objects Using Segments of Morphological Thinning," *Proceeding of the 1995 Korean Signal Processing Conference*, pp. 511-515, Sep. 1995.
- [227] Chae Soo Lee, Kyeong Man Kim, Eung Joo Lee, and Yeong Ho Ha, "Color Image Enhancement Based on Land's Color Constancy Algorithm," *The 1st Color Imaging Workshop*, Daegu, Korea, pp. 11-19, Apr. 1995.
- [228] Hae Kwan Jeong, Han Kyu Lee, Jin Soo Choi, and Yeong Ho Ha, "A VLSI Architecture for the Alternative Subsampling-based Block Matching Algorithm," *Proceedings of '95 DSP Workshop*, Seoul, Korea, pp. 147-151, Mar. 1995.
- [229] Jin Soo Choi, and Yeong Ho Ha, "Fractal Image Coding Using Block Analysis in Frequency Domain," *Proceeding of Workshop on 1995 Image Processing and Understanding*, Daejeon, Korea, pp. 225-231, Feb. 1995.
- [230] Ji Hyeong Kang, Jin Soo Choi, Young Sik Park, and Yeong Ho Ha, "An Improved Fractal Coding Using Fractal Dimension," *Proceedings of the 1994 Korean Signal Processing Conference*, Incheon, Korea, vol. 7, no 1, pp.1006-1010, Sep. 1994.
- [231] Wang Guk Lee, Gi Seok Kim, In Gab Jeong, and Yeong Ho Ha, "A Stereo Matching by the Consensus of Bi-Directional Matching Possibility," *Proceedings of the 1994 Korean Signal Processing Conference*, Incheon, Korea, vol. 7, no 1, pp.579-584, Sep. 1994.
- [232] Kyu Phil Han, Yong Suk Kim, Kyeong Hoon Do, and Yeong Ho Ha, "Stereo Matching Based on Edge and Area Information," *Proceedings of the 1994 Korean Signal Processing Conference*, Incheon, Korea, vol. 7, no 1, pp.507-511, Sep. 1994.
- [233] Kyeong Man Kim, Jeong Yeop Kim, Eung Joo Lee, and Yeong Ho Ha, "Color Image Quantization Using Color Activity Weighted Distortion Measure of Human Vision," *Proceedings of the 1994 Korean Signal Processing Conference*, Incheon, Korea, vol. 7, no 1, pp.877-881, Sep. 1994.
- [234] Ji Hoon Kim, Yeong Ho Ha, and Chan Sik Hwang, "A Study on Compatible Coding of HDTV Signal Using Spatio-Temporal Weighted Prediction Method," *Proceedings of the 1994 Korean Signal Processing Conference*, Incheon, Korea, vol. 7, no 1, pp.688-692, Sep. 1994.
- [235] Jun Jae Lee, Young Suk Kim, Byung Kon Hwang, and Yeong Ho Ha, "A Wavelet Based Multiresolution Approach for Stereo Matching," *Proceeding of Workshop on 1995 Image Processing and Understanding*, Kyoung Ju, Korea, pp. 55-60, Jan. 1994.
- [236] Yong Suk Kim, Jun Jae Lee, In Gab Jeong, Wang Guk Lee, and Yeong Ho Ha, "A Hierarchical Stereo Matching Algorithm in Wavelet Transform Domain Using Neural Networks," *Proceedings of the 1993 Korean Signal Processing Conference*, Taejon, Korea, vol. 6, no 1, pp.643-647, Sep. 1993.
- [237] Hyoung Ki Yoon, Jeong Yeop Kim, Eung Joo Lee, and Yeong Ho Ha, "Image Enhancement Using Color Constancy under Non-Uniform Illumination," *Proceedings of the 1993 Korean Signal Processing Conference*, Taejon, Korea, vol. 6, no.1, pp.287-290, Sep. 1993.
- [238] Gi Seok Kim, Kyeong Hoon Do, Kap Hyun Kwon, and Yeong Ho Ha, "Texture Classification Based on Morphological Subband Decomposition," *Proceedings of the 1993 Korean Signal Processing Conference*, Taejon, Korea, vol. 6, no 1, pp.713-717, Sep. 1993.



- [239] Yong Ha Kim, Jin Soo Choi, Soon Ja Kim, and Yeong Ho Ha, "HDTV Image Compression Algorithm Using Leak Factor and Human Visual System," *Proceedings of the 1993 Korean Signal Processing Conference*, Taejon, Korea, vol. 6, no 1, pp.433-436, Sep. 1993.
- [240] Sung Ho Bae, Jeong Yeop Kim, and Yeong Ho Ha, "Image Enhancement Using Color Constancy and Pseudo-linear IHS-based Coordinate System," *Proceeding of Workshop on 1993 Image Processing and Image Understanding*, Seoul, Korea, pp. 107-111, Feb. 1993.
- [241] Seung Kyu Park, Jun Jae Lee, Kyeong Hoon Do, and Yeong Ho Ha, "Hopfield Neural Network Modeling of Cooperative Architecture for Stereo Matching," *Proceedings of The 3rd Neural Network Conference*, pp. 207-212, 1992.
- [242] Jae Hwui Bae, Jun Jae Lee, Soon Ja Kim, and Yeong Ho Ha, "Image Restoration Using Directional Multistage Morphological Filter," *Proceedings of KITE Fall Conference*, Seoul, Korea, vol. 15, no. 2, pp. 455-459, Oct. 1992.
- [243] Gak Min, Jae Chang Shim, Byung Kon Hwang, and Yeong Ho Ha, "On-Line Handwritten English Alphabet Recognition Using Structural Features and Fuzzy Inference," *Proceedings of KITE Fall Conference*, Seoul, Korea, vol. 15, no. 2, pp. 686-689, Oct. 1992.
- [244] O Ju Kwon, Kyeong Hoon Do, Ki Ho Hyun, and Yeong Ho Ha, "3-D Object Recognition Using Shape Representation," *Proceedings of the 1992 Korean Signal Processing Conference*, Seoul, Korea, vol. 5, no. 1, pp. 257-261, Sep. 1992.
- [245] Sung Ho Bae, Jeong Yeop Kim, Kap Hyeon Kwon, and Yeong Ho Ha, "Image Enhancement Using Color Constancy Algorithm," *Proceedings of the 1992 Korean Signal Processing Conference*, Seoul, Korea, vol. 5, no. 1, pp. 605-608, Sep. 1992.
- [246] Jae Kyoung Moon, Jin Soo Choi, Suk Hyun Kim, Soon Ja Kim, and Yeong Ho Ha, "Adaptive Coding of Prediction Error by HVS in HDTV," *Proceedings of the 1992 Korean Signal Processing Conference*, Seoul, Korea, vol. 5, no. 1, pp. 699-702, Sep. 1992.
- [247] Hee Soo Kim, Wang Guk Lee, Soon Ja Kim, and Yeong Ho Ha, "Image Interpolation Using Locally Adaptive Parametric B-Spline Function," *Proceedings of the 1992 Korean Signal Processing Conference*, Seoul, Korea, vol. 5, no. 1, pp. 232-235, Sep. 1992.
- [248] Kwang Ho Lee, Jun Jae Lee, and Yeong Ho Ha, "Neural Network Modeling for Range Image Segmentation and Classification," *Proceeding of Workshop on 1992 Image Processing and Image Understanding*, Chungju, Korea, pp. 103-108, Jan. 1992.
- [249] Jeong Yeop Kim, Jae Chang Shim, Seung Ok Park, Sung Gyoo Yu, and Yeong Ho Ha, "Color Image Enhancement Using Pseudo-linear IHS-based Coordinate System," *Proceedings of the 1991 Korean Signal Processing Conference*, Daegu, Korea, vol. 4, no. 1, pp. 419-422, Oct. 1991.
- [250] Jin Soo Choi, Ki Ho Hyun, Soon Ja Kim, and Yeong Ho Ha, "Image Compression Using Subband Coding with Hierarchical Structure," *Proceedings of the 1991 Korean Signal Processing Conference*, Daegu, Korea, vol. 4, no. 1, pp. 379-382, Oct. 1991.
- [251] Kyeong Hoon Do, Jun Jae Lee, Seok Je Cho, and Yeong Ho Ha, "Stereo Matching Using Analog Neural Network," *Proceedings of the 1991 Korean Signal Processing Conference*, Daegu, Korea, vol. 4, no. 1, pp. 165-169, Oct. 1991.
- [252] In Gab Jeong, Ki Ho Hyun, Jun Jae Lee, Kwang Ho Lee, and Yeong Ho Ha, "Range Data Segmentation and Classification Using Eigenvalues of Polynomial Function and Neural Networks," *Proceedings of the 1991 Korean Signal Processing Conference*, Seoul, Korea, vol. 4, no. 1, pp. 460-464, Oct. 1991.
- [253] Eung Joo Lee, Soon Ja Kim, and Yeong Ho Ha, "Directional Interpolation Using Parametric B-Spline Function," *Proceedings of the 1990 Korean Signal Processing Conference*, Seoul, Korea, vol. 4, no 1, pp. 106-110, Oct. 1990.

- [254] Ho Jin Kim, Jun Jae Lee, Seok Je Cho, and Yeong Ho Ha, "Image Segmentation Using Neural Network Satisfying Consistency and Unambiguity," *Proceedings of the 1990 Korean Signal Processing Conference*, Seoul, Korea, vol. 3, no 1, pp. 134-138, Oct. 1990.
- [255] Jin Hee Kim, Hyun K Ho, Seok Je Cho, and Yeong Ho Ha, "Seal Imprint Verification by Hierarchical Classification Method," *Proceedings of the 1990 Korean Signal Processing Conference*, Seoul, Korea, vol. 3, no 1, pp. 101-105, Oct. 1990.
- [256] Byeong Kil Lee, Soon Ja Kim, and Yeong Ho Ha, "Locally Adaptive Image Resampling Using New Spline Function," *Proceedings of the 1990 Korean Signal Processing Conference*, Seoul, Korea, vol. 3, no 1, pp. 370-374, Oct. 1990.
- [257] Jae Chang Shim, Kwang Ho Lee, Seok Je Cho, and Yeong Ho Ha, "Filling Algorithm Bi-directional Information," *Proceedings of the 1990 Korean Signal Processing Conference*, Seoul, Korea, vol. 3, no 1, pp. 366-369, Oct. 1990.
- [258] Sang Kug Lee, Soon Ja Kim, Seok Je Cho, and Yeong Ho Ha, "Image Sharpening Using Gabor Even Function," *Proceedings of the 1990 Korean Signal Processing Conference*, Seoul, Korea, vol. 3, no 1, pp. 124-127, Oct. 1990.
- [259] Young Chan Park, Ki Ho Hyun, Seok Je Cho, and Yeong Ho Ha, "Range Image Segmentation Using Multidimensional," *Proceedings of the 1990 Korean Signal Processing Conference*, Seoul, Korea, vol. 3, no 1, pp. 111-115, Oct. 1990.
- [260] Jun Jae Lee, Seok Je Cho, and Yeong Ho Ha, "Stereo Matching Based on Phase Information of Gabor Filters Using Neural Network," *Proceedings of KITE Fall Conference*, Seoul, Korea, pp. 485-488, Nov. 1989.
- [261] Byung Koo Ahn, Seok Je Cho, and Yeong Ho Ha "Edge and Valley Extraction Using Central Moment with Modified Probability Density Function," *Proceedings of the 1989 Korean Signal Processing Conference*, Seoul, Korea, vol. 3, no 1, pp. 246-249, Oct. 1989.
- [262] Ki Ho Hyun, Seok Je Cho, Byung Kon Hwang, and Yeong Ho Ha, " Segmentation and Classification of Range Data Using Phase Information of Gabor Filter," *Proceedings of the 1989 Korean Signal Processing Conference*, Seoul, Korea, vol. 3, no 1, pp. 236-240, Oct. 1989.
- [263] Seong Yong Chun, Seok Je Cho, and Yeong Ho Ha, " Image Sharpening Using Gabor Filter," *Proceedings of the 1989 Korean Signal Processing Conference*, Seoul, Korea, vol. 3, no 1, pp. 227-230, Oct. 1989.
- [264] Kyeong Soo Kim, Kil Houm Park, Soon Ja Kim, and Yeong Ho Ha" Edge-Sharpener B-spline Interpolation in Digital Image Processing," *Proceeding of Conference on Image Processing and Image Communication*, Seoul, Korea, pp. 158, Feb. 1989.
- [265] Jae Chang Shim, Seok Je Cho, Kwang Ho Lee, Yeong Ho Ha, "Moving Objects Segmentation Using Static and Dynamic Edge," *Proceeding of Conference on Image Processing and Image Communication*, Seoul, Korea, pp. 152-158, Feb. 1989.
- [266] Yang Woo Park, Seok Je Cho, Yeong Ho Ha, and Soon Ja Kim, "Image Segmentation Using Relaxation Algorithm with Modified Weighting Initial Probability," *Proceeding of Conference on Image Processing and Image Communication*, Seoul, Korea, pp. 142-152, Feb. 1989.
- [267] Seong Dong Kim, Seok Je Cho, Yeong Ho Ha, and Wu Il Lee, "The Korean Character Recognition Using Strokes in Neural Network with Hough Transform," *Proceeding of Conference on Image Processing and Image Communication*, Seoul, Korea, pp. 143-146, Feb. 1989.
- [268] Byung Kon Hwang, Seok Je Cho, Yeong Ho Ha, and Soo Joong Kim, "Segmentation and Classification of 3-D Images from Range Data," *Proceedings of KITE Fall Conference*, Seoul, Korea, vol. 11, no. 1, Nov. 1988

- [269] Jeong Woo Kim, Yang Hoi Doh, Shin Il Jeong, Yeong Ho Ha, and Soo-Joong Kim, "Korean Character Recognition with Tree Using NRF-SDF," *Proceeding of Workshop on 1988 Signal Processing*, Seoul, Korea, vol. 1, no. 1, pp. 114-117, 1988.
- [270] Wang Guk Lee, Seok Je Cho, Kwang Ho Lee, and Yeong Ho Ha, "Depth from Triple Views Using the Direction Information of Feature Points," *Proceeding of Workshop on 1988 Signal Processing*, Seoul, Korea, vol. 1, no. 1, pp. 118-122, 1988.
- [271] Hark Sang Kim, Young Mo Kim, and Yeong Ho Ha, "A New Comparison Method of Edge Detectors," *Proceeding of Workshop on 1988 Signal Processing*, Seoul, Korea, vol. 1, no. 1, pp. 77-82, 1988.
- [272] Yang Hoi Doh, Jeong Woo Kim, Shin Il Jeong, Yeong Ho Ha, and Soo Joong Kim, "Modified Ternary Phase-Only SDF Filter for Korean Character Recognition," *Proceedings of the 1988 Electrical and Electronics Conference*, Suwon, Korea, pp. 406-409, 1988.
- [273] Hyun Sik Ahn, Wang Guk Lee, Seok Je Cho, and Yeong Ho Ha, "Global Coordinate Extraction of IC Chip Pattern Using Vertex-form Matching," *Proceedings of the 1988 Electrical and Electronics Conference*, Suwon, Korea, pp. 553-556, 1988.
- [274] Byung Moon Jung, Kil Houm Park, and Yeong Ho Ha, "Image Reconstruction from Incomplete Data Using a New Sampling Scheme," *Proceedings of the 1988 Electrical and Electronics Conference*, Suwon, Korea, pp. 232-235, 1988.
- [275] Mun Hyoung Cho, Kwang Ho Lee, Byung Kon Hwang, and Yeong Ho Ha, "3-D Planar Object Segmentation by Point Orientation Distribution from Single View Range Data," *Proceedings of the 1987 Korean Signal Processing Conference*, vol. 10, no. 1, pp. 576-581, Dec. 1987.
- [276] Yeong Ho Ha and Tae Uk Uam, "Image Segmentation by Adaptive Local Probabilistic Relaxation," *Proceedings of 1987 KICS Conference*, pp. 41-45, 1987.
- [277] Jae Cheol Lee, Yang Hoi Doh, Yeong Ho Ha, and Soo Joong Kim, "Korean Alphabet Recognition Using Phase-only Filter," *Proceedings of the 1987 Electrical and Electronics Conference*, pp. 1445-1448, Jul. 1987.
- [278] Seok Je Cho, Kil Houm Park, Kwang Ho Lee, Young Mo Kim, and Yeong Ho Ha, "3-D recognition of Position Using Epipolar Line and Matching from Stereo Image," *Proceedings of the 1987 Electrical and Electronics Conference*, Pohang, Korea, pp. 1441-1444, Jul. 1987.
- [279] Chang Rim Koh, Yeong Ho Ha, and Soo Joong Kim, "Geometrical Transform of Ocular Fundus Fluorescein Angiogram Using Affine Transformation," *Proceedings of the 1986 Korean Signal Processing Conference*, Daegu, Korea, Pohang, Korea, vol. 10, no. 1, pp. 738-741, Dec. 1986.
- [280] Han O Yun, Yeong Ho Ha, and Soo Joong Kim, "Restoration of Impulse-noise Image Using Threshold Median-Mean Filter," *Proceedings of the 1986 Korean Signal Processing Conference*, Daegu, Korea, vol. 10, no. 1, pp. 54-59, Nov. 1986.
- [281] Jin Ho Cho and Yeong Ho Ha, "Feasibility of Near IR Tomography," *Proceedings of the 1986 Korean Signal Processing Conference*, Daegu, Korea, vol. 10, no. 3, pp. 54-59, Oct. 1986.
- [282] Yoon Seok Nam, Yeong Ho Ha, and Soo Joong Kim, "A Generalization of Image Segmentation Using Histogram Distribution Function," *Proceedings of the 1986 Korean Signal Processing Conference*, Daegu, Korea, vol. 9, no. 1, pp. 479-482, Jun. 1986.

#### RESEARCH PROJECTS(as Principal Investigator)

---

- [1] A Study on Feasibility of Near-Infrared Tomography, funded by Kyungpook National University

- Hospital. (1/1986 ~ 12/1986)
- [2] A Study on Extraction of Circuit Diagram from Single Chip Image, funded by Inter-university Semiconductor Research Center. (7/1986 ~ 6/1987)
  - [3] A Study on 3D Image Reconstruction and Recognition from 2D Images, funded by Korea Science and Engineering Foundation. (10/1986 ~ 10/1987)
  - [4] A Study on New Pattern Recognition Based on Electro-Optical Signals, funded by Korea Research Foundation. (3/1987 ~ 2/1989)
  - [5] A Study on Segmentation Using Histogram Distribution Function, funded by Kyungpook National University Research Foundation. (4/1987 ~ 6/1988)
  - [6] Development of IC Layout Pattern Recognition Algorithm Using Image Processing, funded Electronics and Telecommunications Research Institute. (9/1988 ~ 6/1989)
  - [7] Development of IC Layout Pattern Recognition System Using Image Processing Method, funded Electronics and Telecommunications Research Institute. (9/1988 ~ 6/1989)
  - [8] CAD and OA System Development, funded by Daehyun Tech Co., Ltd. (1/1989 ~ 12/1989)
  - [9] CAD System Development for Precision Apparatus, funded by Daehyun Tech Co., Ltd. (6/1989 ~ 12/1990)
  - [10] Software Development for Microscopic Image Processing, funded by Applied Engineering Co. (7/1987 ~ 12/1989)
  - [11] Development of Videophone System, funded by LG Electronics Co., Ltd. (7/1989 ~ 7/1990)
  - [12] A Study on 3D Image Analysis and Synthesis, funded by Korea Science and Engineering Foundation. (7/1989 ~ 6/1992)
  - [13] Image Recognition System and Software Development, funded by Shinil Computer System Co. (12/1989 ~ 5/1990)
  - [14] BESS Observation and Diagnosis System Using Infrared Camera, funded by Korea Electrotechnology Research Institute. (1/1990 ~ 12/1990)
  - [15] Hardware Realization of Still Image Coding, funded by LG Electronics Inc. (9/1989 ~ 10/1990)
  - [16] ADCT/VQ Algorithm and VLSI Design for HDTV Subband Coding, funded by Electronics and Telecommunications Research Institute. (11/1989 ~ 12/1990)
  - [17] Development of HDTV Signal Transmission Method, funded by Samsung Electronics Co., Ltd. (4/1990 ~ 5/1991)
  - [18] Software Development of Rhino Robot Vision System, funded by Applied Engineering Co. (6/1990 ~ 12/1990)
  - [19] Chip Development of Interpolation in DSP, funded by Electronics and Telecommunications Research Institute. (7/1990 ~ 8/1991)
  - [20] A Study on Color Image Enhancement and Segmentation, funded by Korea Research Institute of Standards and Science. (9/1990 ~ 12/1992)
  - [21] Development of Digital Zoom System for Video Camera, funded by LG Electronics Inc. (10/1990 ~ 10/1991)
  - [22] Hardware Realization of Image Recognition System, funded by Jeil Metal Co. (11/1990 ~ 2/1991)
  - [23] Development of Signal Processing Circuit for FET Type Sensor, funded by Sensor Technology Research Center, Kyungpook National University. (3/1991 ~ 2/1992)
  - [24] Development of Knowledge-based Alarming System, funded by Korea Electrotechnology Research Institute. (10/1991 ~ 3/1992)
  - [25] A Study on Stereo Vision Using Color Information and Neural Network Model, funded by Korea Research Foundation. (10/1991 ~ 10/1992)
  - [26] Development of Codec Algorithm for DSC-HDTV, funded by Korea Institute of Industrial Technology. (1/1992 ~ 12/1993)
  - [27] A Study on AI Technique Application for Intelligent Switching Board, funded by Korea Electrotechnology Research Institute. (1/1992 ~ 10/1992)
  - [28] Development of Automated Image Recognition System, funded by Daehyun Tech Co., Ltd. (1/1992 ~ 12/1993)

- [29] A Study on Digital Color Image Processing and Recognition Technique, funded by Korea Science and Engineering Foundation. (9/1992 ~ 8/1995)
- [30] Infrared Image Processing Software Development, funded by Dongseo Hi-Tech Co. (2/1993 ~ 8/1993)
- [31] Development of Natural Color Reappearance Algorithm and Color Evaluation System on TV Images, funded by LG Electronics Inc. (4/1993 ~ 12/1994)
- [32] Development of Digital Microscopic Image System, funded by Industry/University Cooperation Consortium. (7/1993 ~ 6/1994)
- [33] Software Development for Surveillance of Traffic and Vehicles, funded by Chilsung Electronics Co. (1/1994 ~ 4/1994)
- [34] Image Processing and Vision Technique Development/Application, funded by Daehyun Tech Co., Ltd. (1/1994 ~ 12/1995)
- [35] Development of Traffic Surveillance and Transmission System Using Digital Image Processing, funded by Science and Technology Policy Institute. (6/1994 ~ 5/1995)
- [36] Development of Digital Communication ASIC, funded by Electronics and Telecommunications Research Institute. (4/1994 ~ 11/1994)
- [37] Development of Multimedia Application System Based on Digital Signal Processing, funded by Daehyun Tech Co., Ltd. (3/1995 ~ 8/1997)
- [38] Color Image Processing Software Development of Color TV, funded by LG Electronics Inc. (3/1995 ~ 4/1995)
- [39] Infrared Image Processing Software Development Based on Window, funded by Dongseo Hi-Tech Co. (3/1995 ~ 8/1995)
- [40] A Study on Digital Signal/Image Processing and Application, funded by LG Electronics Inc. (7/1994 ~ 6/1996)
- [41] Development of Squeeze Controller Based on DSP in Textile Printing Machine, funded by Industry/University Cooperation Consortium. (9/1995 ~ 8/1996)
- [42] Development of Color Image Processing Software Using Ink Jet Textile Printing Machine and Printing Technique, funded by Korea Institute of Industrial Technology. (9/1995 ~ 8/1996)
- [43] Development of DSP-based Automated TV Sound Selection Algorithm and System, funded by LG Electronics Inc. (10/1996 ~ 2/1997)
- [44] Development of Next Generation Image Compression Algorithm and Video Codec, funded by Institute of Industrial Technology Evaluation and Planning. (12/1995 ~ 11/1997)
- [45] A Study on Very-low Bit Rate Video Encoding on Digital Mobile Communication Network, funded by Korea Research Foundation. (9/1995 ~ 5/1996)
- [46] Development of Teaching Material for DSP Design Education, funded by Korea Electronic Technology Institute. (9/1995 ~ 5/1996)
- [47] A Study on Human Color Sensibility Analysis and Reappearance Technique, funded by Korea Research Institute of Standards and Science. (1/1996 ~ 8/1996)
- [48] A Study on MPEG Coding Based on Mathematical Morphology, funded by Korea Science and Engineering Foundation. (3/1996 ~ 2/1998)
- [49] Development of Content-based Image Compression Algorithm, funded by Electronics and Telecommunications Research Institute. (6/1996 ~ 12/1996)
- [50] Development of Efficient Access Methods Between ATM User and ATM Switch, funded by Korea Telecom. (6/1996 ~ 12/1996)
- [51] Development of Favorite Color Reappearance Algorithm in TV, funded by LG Electronics Inc. (10/1996 ~ 4/1997)
- [52] A Study on Color Reproduction Technique, funded by Korea Research Institute of Standards and Science. (12/1996 ~ 9/1997)
- [53] Development of Color Enhancement and Matching Techniques for Ink Jet Color Printer, funded by LG Electronics Inc. (3/1996 ~ 12/1997)
- [54] Development of Distance-sensing System in TV Set, funded by LG Electronics Inc. (3/1997 ~

12/1997)

- [55] A Study on Extraction of 3D Depth Information Using Stereo Matching Method Based on Genetic Algorithm, funded by Korea Research Foundation. (3/1997 ~ 2/1999)
- [56] Development of TV Viewing Habit Algorithm Based on Human Ergonomics, funded by LG Electronics Inc. (4/1997 ~ 5/1998)
- [57] Development of Image Processing and Coding Method in Digital Still Camera, funded by Samsung Aerospace Industries Ltd. (4/1997 ~ 4/1998)
- [58] Development of High Quality Image Transformation of TV Based on DSP, funded by LG Electronics Inc.
- [59] A Study on SNHC Development for Efficient Compound Image Service in the Internet, funded by Electronics and Telecommunications Research Institute. (7/1997 ~ 6/1998)
- [60] A Study on MPEG-4 Video Coding Methods and Hardware Technique Development, funded by Korea Science and Engineering Foundation. (9/1997 ~ 8/2000)
- [61] Halftoning Method Development of Color Ink Jet Printer Using Variable Drop, funded by Samsung Electronics Co., Ltd. (5/1998 ~ 4/2000)
- [62] Digital Camera Development Using Color Sensibility, funded by Korea Science and Technology Policy Institute. (12/1998 ~ 11/1999)
- [63] A Study on Color Information Extraction and Indexing for Image/Video Retrieval, funded by Electronics and Telecommunications Research Institute. (4/1999 ~ 12/1999)
- [64] A Study on Object-based Coding of Stereo Sequence, funded by Institute of Information Technology Assessment. (7/1998 ~ 6/2001)
- [65] Development of Color Reappearance Technique for Monitor Image of Road Illuminated by Head Lamp, funded by Samlip Industrial Co., Ltd. (7/1999 ~ 2/2000)
- [66] Signal Processing Algorithm Development for Color Noise Reduction in TV, funded by LG Electronics Inc. (11/1999 ~ 10/2000)
- [67] Printing Technique Development for Digital Still Camera Image, funded by Korea C4 co. (12/1999 ~ 11/2000)
- [68] Development of Hybrid Video Mailing Service for Handset of Mobile Communication, funded by Samsung Electronics. (2/2000 ~ 1/2001)
- [69] Analysis and Modeling of H.263+ Annex, funded by C&S Technology. (4/2000 ~ 3/2001)
- [70] A Study on Multimedia Watermarking and its Intellectual Property Management and Protection, funded by Electronics and Telecommunications Research Institute. (5/2000 ~ 11/2000)
- [71] Development of Compression/Decompression Method for Wireless Transmission of PDP TV Signal, funded by LG Electronics Inc. (7/2000 ~ 6/2001)
- [72] A Study on Color Printing Method and Color Appearance Model for Digital Color Representation, funded by Korea Science and Engineering Foundation. (9/2000 ~ 8/2003)
- [73] Development of User Interface Software for FPD, funded by LG Electronics Inc. (11/2000 ~ 10/2001)
- [74] A Study on 3D/2D Image Conversion Method, funded by Electronics and Telecommunications Research Institute. (5/2001 ~ 11/2001)
- [75] Development of Digital Color Processing Method for Inkjet-Printer, funded by Korea Institute of Industrial Technology Evaluation and Planning. (9/2001 ~ 8/2002)
- [76] Development of Digital TV(DVB-T) Platform for European Terrain Broadcasting, funded by LG Electronics Inc. (3/2002 ~ 2/2003)
- [77] Development of DVB-T platform, funded by LG Electronics Inc. (3/2002 ~ 4/2003)
- [78] A Study on Real-time Extraction of Depth and Disparity Map for Multi-viewpoint Images, funded by Electronics and Telecommunications Research Institute. (4/2002 ~ 12/2002)
- [79] A Study on Development of Shape Coding Algorithm and its Optimum Hardware Design Method for Object-based MPEG-4 Codec, funded by Electronics and Telecommunications Research Institute. (5/2002 ~ 12/2002)
- [80] A Study on Digital Image and Color Processing Algorithm, funded by CoAsia (6/2002 ~ 5/2003)

- [81] Development of Color Management System for Digital Color Processing and Reproduction, funded by National Research Laboratory Program from Ministry of Science and Technology of Korea (6/2002 ~ 6/2005)
- [82] Development of Digital Color Processing Method for Inkjet-Printer, funded by Korea Institute of Industrial Technology Evaluation and Planning. (9/2002 ~ 8/2004)
- [83] Development of Algorithm for Reproducing Realistic Image of Automobile Rear Combination Lamp, funded by Samlip Industrial Co., Ltd. (11/2002 ~ 2/2004)
- [84] Development of Color Matching Technology for Mobile Phone Display, funded by Samsung Electronics. (2/2003 ~ 7/2003)
- [85] Development of Color Matching Technique of DTV for Various Input Picture Signals and Display Devices, funded by LG Electronics Inc. (3/2003 ~ 2/2004)
- [86] Development of bridge media interface for DTV, funded by LG Electronics Inc. (4/2003 ~ 3/2004)
- [87] Development of worldwide DTV platform, funded by LG Electronics Inc. (4/2003 ~ 3/2004)
- [88] Development of Gamut Compression and Extension Technique to Improve Color Reproduction for Multi-Primary Display, funded by Samsung Advanced Institute of Technology. (6/2003 ~ 1/2004)
- [89] A Study on Digital Image and Color Processing Algorithm, funded by CoAsia. (6/2003 ~ 5/2004)
- [90] Development of Color Management System for Digital Color Processing and Reproduction, funded by National Research Laboratory Program from Ministry of Science and Technology of Korea (6/2003 ~ 6/2004)
- [91] Software Development for Analysis of Image Quality, funded by Electronics and Telecommunications Research Institute. (7/2003 ~ 12/2003)
- [92] Development of Algorithm and Test Bed for Quantitative Evaluation of Mobile Phone Camera Image, funded by Samsung Electronics. (5/2003 ~ 10/2004)
- [93] Development of Spectro-radiometric Characteristic Tool of Camera, funded by Electronics and Telecommunications Research Institute. (7/2003 ~ 11/2004)
- [94] Development of Multimedia Interface for DTV, funded by LG Electronics Inc. (4/2004 ~ 9/2005)
- [95] Development of DTV Platform for ATSC Method, funded by LG Electronics Inc. (9/2004 ~ 3/2005)
- [96] Development of Kiosk System for Digital Media, funded by OISCO. (10/2004 ~ 3/2005)
- [97] Adaptive Color Matching Considering Illuminant Effect in Mobile Phone, funded by Samsung Electronics. (1/2005 ~ 12/2005)
- [98] Enhancement of Image Quality Based on Color Appearance Model in PDP, funded by LG Electronics Inc. (2/2005 ~ 10/2005)
- [99] Development of Lighting Simulator and LED Rank Combination Algorithm for Effective LED BLU with White Uniformity and High Luminance, funded by Samsung Electro-Mechanics Co., Ltd. (4/2005 ~ 3/2006)
- [100] Development of ATSC Receiver System for Low-cost Digital TV, funded by LG Electronics Inc. (4/2005 ~ 3/2006)
- [101] Development of Core Technology in Next Generation Display and User-Oriented Optimization of Color Reproduction Method, funded by Korea Industrial Technology Foundation (KOTEF) (9/2005 ~ 8/2008)
- [102] Development of Control Algorithm for Constant Luminance, Chromaticity, and Temperature of LED BLU, funded by LG Philips LCD Co., Ltd. (10/2005 ~ 9/2006)
- [103] Quantitative Evaluation of Color Reproduction in Display by International Standard, funded by Samsung SDI. (3/2006 ~ 5/2006)
- [104] A Study on Mobile Beam Projector and Adaptive Color Matching Algorithm, funded by Samsung Electronics. (3/2006 ~ 8/2006)
- [105] Development of DVB-T Receiver System, funded by LG Electronics Inc. (4/2006 ~ 3/2007)
- [106] Development of Reproduction Technology for Panoramic Video based on Color Matching, funded by Samsung Advanced Institute of Technology. (8/2006 ~ 7/2007)
- [107] The Method for Quantitative Evaluation and Improvement in Image Quality of Digital Camera for Lighting Environment, funded by Next Generation Vehicle Technology. (12/2006 ~ 6/2007)

- [108] Development of the Method for DVB-T SI Compliance Testing, funded LG Electronics Inc. (4/2007 ~ 3/2008)
- [109] Development of Color Matching Technique between Vehicle Camera and Display Device, funded by Next Generation Vehicle Technology. (1/2008 ~ 7/2008)
- [110] Development of Auto Exposure Control Technique with Anti-Flickering in Image Signal Processor, funded by Samsung Electronics. (2/2008 ~ 10/2008)
- [111] Improved Super Resolution Imaging Method, funded by Kyungpook National University. (11/2008 ~ 10/2009)
- [112] Development of Automatic and Real-Time Color Matching Technique between Vehicular Camera and Display Device, funded by Next Generation Vehicle Technology. (12/2008 ~ 2/2010)
- [113] Color Correction on Colored Screen and Improvement of Image Perception for Mobile Projector, funded by Samsung Electronics. (4/2009 ~ 11/2009)
- [114] Development of Optimized Color Conversion Method to User's Monitor Environment, funded by Samsung Electronics. (2/2009 ~ 1/2010)
- [115] Development of End-to-End Color Consistency Technology for High Quality Digital Cinema Image Realization, funded by Ministry of Culture, Sports and Tourism and Korea Culture Content Agency. (3/2009 ~ 2/2011)
- [116] A Study of Acquisition, Expression, and Color Reproduction of High Quality HDR(high dynamic range) Image, funded by National Research Foundation of Korea. (5/2009 ~ 2/2012)
- [117] Development of Color Correction Method for Skin Tone and Faded Images, funded by Samsung Electronics. (3/2010 ~ 2/2011)
- [118] Development of Analysis and Assessment Algorithm for Objective Evaluation of OLED Display, funded by LG Display Co., Ltd. (2/2011~12/2011)
- [119] Development of Moire Reduction Algorithm according to the Removal of OLPF in Digital Camera, funded by Samsung Electronics. (7/2011~6/2012)
- [120] Development of Ultra-low Bit-rate Video Codec & Media Conversion Solution, funded by Ministry of Knowledge Economy. (6/2012~4/2014)
- [121] Pre-Post production Human Engineering Outpost DIT system, funded by Korea Creative Content Agency. (7/2012~3/2015)
- [122] Development of Optimal Brightness Adjustment Method for each App, funded by Samsung Electronics. (2/2013~7/2013)
- [123] Development of Image Quality Assessment and Color Reproduction Technology based on Display Characteristics and Color Appearance Model, funded by National Research Foundation of Korea. (6/2013~5/2014)
- [124] Development of Image Quality Assessment and Color Reproduction Technology based on Display Characteristics and Color Appearance Model, funded by National Research Foundation of Korea. (6/2013~5/2016)
- [125] Development of Spatio-temporal Image Quality Enhancement Technology for Mobile Display based on Human Perception, funded by Samsung Electronics. (4/2014~2/2015)

#### GRADUATE DISSERTATION (Ph. D) SUPERVISION

---

- [1] Seok Je Cho, "Color Stereo Matching Using Neural Network Modeling," August 1991.
- [2] Kwang Ho Lee, "Neural Network Modeling for Range Image Segmentation and Classification," February 1992.
- [3] Jae Chang Shim, "Texture Recognition and Image Processing Using New Contour Tracking Method," August 1993.
- [4] Ki Ho Hyun, "Range Image Segmentation and Classification Using Hierarchical Structure of Surface Feature," February 1994.



- [5] Jun Jae Lee, "3D Reconstruction from Stereo Image Using Hopfield Neural Network of a New Energy Function," August 1994.
- [6] Wang Guk Lee, "Iterative Relaxational Stereo Vision Using the Consensus of Bi-directional Matching Possibility," February 1995.
- [7] Kyeong Hoon Do, "Relaxational Stereo Matching Using Adaptive Support Between Disparities," August 1995.
- [8] Jin Soo Choi, "Fractal Image Coding Using Block Classification in DCT Domain," February 1996.
- [9] Eung Joo Lee, "Color Constancy-based TV Image Enhancement," August 1996.
- [10] In Gab Jeong, "Range Data Segmentation and Classification Using Cooperative Relaxation Algorithm of Surface Curvature," February 1997.
- [11] Gi Seok Kim, "Video Segmentation and Adaptive Contour Coding for Region-based Image Coding," August 1997.
- [12] Yong Suk Kim, "Hierarchical Stereo Matching Algorithm Based on Modified Wavelet Decomposition Process," August 1997.
- [13] Hyun Sik Ahn, "Global and Local Range Finding Techniques for Large Scale Material Handling," February 1998.
- [14] Young Sik Park, "A Hierarchical Spatio-temporal Video Segmentation Based on a Binary Split Algorithm," February 1998.
- [15] Kun Woen Song, "Video Sequence Segmentation Using Combined Similarity Measure for Region-based Coding," August 1998.
- [16] Kyung Man Kim, "Natural Color Reproduction by Vector Transformation and Color Quantization Based on HVS," February 1999.
- [17] Tae Uk Uam, "Image Processing Oriented Relaxation Based on FAM Rule," August 1999.
- [18] Kyu Phil Han, "Genetic Stereo Marching Using Population Based Incremental Learning With Adaptive Chromosomes," August 1999.
- [19] Jae Kyoung Moon, "A Channel Estimation Methods for OFDM Systems in Time-Varying Multipath Fading Channels," August 1999.
- [20] Chae Soo Lee, "Gamut Mapping of Variable Anchor Points and Model-based Dithering of Dot Pattern Selection," February 2000.
- [21] Yang Woo Park, "Uniform Color Distribution via Gamut Mapping Based on Lightness and Chroma Rearrangements," August 2000.
- [22] Cheol-Hee Lee, "Cross-media Color Reproduction via Gamut-based Printer Sample Determination and Vector Error Diffusion," August 2000.
- [23] Jeong Yeop Kim, "Estimation of Illuminant Chromaticity from Single Color Image Using Perceived Illumination and Highlight," February 2001.
- [24] Eui Yoon Chung, "Human Object Extraction Using Facial Features for Object-Based Coding," February 2001.
- [25] Hee Soo Kim, "Oblivious Watermarking Using Achromatic and Saturation Information in Color Images," August 2001.
- [26] Ho Young Lee, "Spatial Color Distribution Descriptor for Image Retrieval and Video Segmentation," August 2001.
- [27] Oh Ju Kwon, "Power Efficient OFDM Using Adaptive Partial Transmit Sequences and Predistortion," February 2002.
- [28] Sang Um Choi, "Adaptive 3-D Y/C Separation for NTSC Composite Video Signal Using Motion Estimation and Compensation," August 2002.
- [29] Sung Ryoul Cheon, "Adaptive Modification of Wavelet Coefficients Based on Human Visual System," August 2003.
- [30] Ho Keun Lee, "Compatible Stereoscopic Video Coding Using Disparity Concealment," August 2004
- [31] Yun Tae Kim, "Estimation of Illumination by Surface Recovery Using Valid Pixels in Highlight Region," February 2005

- [32] Ick Hwan Kim, "Estimation of Spectral Reflectance Based on Principal Component Analysis Using Population of Similar Colors," August 2005
- [33] Yang Ho Cho, "Color Reproduction of Flat Panel Display Based on Inverse Characterization of Alternate GOG Model," February 2006
- [34] Gak Min, "Genetic Stereo Matching of Multi-step Population-based Incremental Learning," August 2006
- [35] Kwang Min Jeong, "Video Sequence Matching Using Singular Value Decomposition," August 2006
- [36] Myong Young Lee, "Spectrum-based Ray Tracing Method Using Spherical Intensity Map of Rayset," February 2007
- [37] Tae Yong Park, "Banding Artifact Reduction Using Interweaving Dot-Dispersion Method in Blue-Noise Multilevel Dithering," August 2008
- [38] Oh Seol Kwon, "Estimation of Surface Reflectance Using Principal Components of Similar Colors in Images Under Unknown Illumination," August 2008
- [39] Chang Hwan Son, "Improved Color Separation Based on Dot-Visibility Modeling and Color Mixing Rule for Six-Color Printers," August 2008
- [40] Kee Hyon Park, "Display Characterization Using XYZ Electro-Optical Transfer Functions of Channel and Interchannel Components," February 2009
- [41] Kyung Woo Ko, "Color Embedding to Gray Image and Vice Versa Based on Wavelet Packet Transform," February 2010
- [42] In Su Jang, "Color Correction Based on Multi-scaled Retinex Using Dominant Chromaticity of Image," August 2010
- [43] Tae Hyoung Lee, "High Dynamic Range Image Reconstruction of Super Resolution Quality Using Weight Maps and Luminance Matching Function," February 2012
- [44] Massimo Fierro, "Reduce-Reference Image Noise Reduction via DTCWT Shrinkage," February 2013
- [45] Ho Gun Ha, "Video Compression Framework Based on Triangle Shape Coding Unit," February 2015
- [46] Wang Jun Kyung, "Color Image Enhancement Using Weighted Multi-scale Compensation Based on Gray World Algorithm," February 2016
- [47] Dae Chul Kim, "Illumination Estimation Based on Superpixel Segmentation and Principal Component Analysis," February 2016

#### GRADUATE THESIS (M.S.) SUPERVISION

---

Refer to Homepage