

# OH SEOL KWON

## PRESENT POSITION AND ADDRESS

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Professor  
Department of Robot, Control and Instrumentation Engineering  
School of Electrical Electronics & Control Engineering  
Changwon National University  
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## DATE OF BIRTH

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July 27, 1976

## EDUCATION

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2004-2008	Kyungpook National University <i>Ph. D. in Electronics</i> <i>(Thesis: Estimation of Surface Reflectance Using Principal Components of Similar Colors in Images Under Unknown Illumination, Supervisor: Yeong-Ho Ha)</i>	Taegu, Korea.
2002-2004	Kyungpook National University <i>M.S. in Electronics</i> <i>(Thesis: Illumination Estimation Based on Valid Pixel Selection from CCD Camera Response, Supervisor: Yeong-Ho Ha)</i>	Taegu, Korea
1996-2002	Kyungpook National University <i>B.S. in School of Electrical Engineering &amp; Computer Science</i>	Taegu, Korea

## CARRIER

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July 2024 - Current	Head of Satellite Image Analysis ICT Center
Mar. 2024 - Current	Head of Startup Support Division
Dec. 2021 - Aug. 2022	Electrical and Computer Engineering, Princeton University, NJ, USA, Visiting Fellow
Mar. 2021 - Dec. 2021	Dean of School of Electrical Electronics.& Control Eng., CWNU
Oct. 2018 - Dec. 2021	Head of Department of Robot and Control Eng., CWNU
Oct. 2018 - Feb. 2019	Director of Creative Education Team, SMC Project
Mar. 2014 - Feb. 2016	Director of Industry Support Center, LINC Project
Sep. 2011 - Current	Changwon National University, Assistant/Associate, Professor
Sep. 2010 - Aug. 2011	Samsung Electronics, Visual Display Business, Senior researcher
Oct. 2008 - Jul. 2010	New York University(NYU), USA, Postdoctoral Research Fellow

## PROFESSIONAL SERVICES

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Feb. 2024 - Current	AI Community of Gyeongnam, South Korea
Jan. 2018 - Current	Journal of Imaging Science and Technologyociety, USA(SPIE), <i>Associate Editor</i>

Jan. 2020 – Dec. 2020 Korea Society for Imaging Science and Technology

*Trustee*

Jan. 2020 – Dec. 2020 The Institute of Electronics and Information Engineers, South Korea(IEIE)  
Society of Pusan, Ulsan, and Gyeongnam

*Trustee*

Jan. 2015 – Dec. 2019 Korea Multimedia Society

*Trustee*

## RESEARCH INTERESTS

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Image Processing and Systems

Digital Signal Processing

Artificial Intelligence

Deep Learning Algorithm

Computer Vision

## SCHOLARSHIPS & AWARDS

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Dec 7, 2022 Best Paper Award, The Conference of Korean Institute of Broadcast and Media Engineers

Feb. 23, 2022 Best Teaching Awards, Changwon National University

July 6, 2021 Best Paper Award, International Conference of Multimedia Information Technology Application (MITA2021)

Feb. 24, 2021 Best Teaching Awards, Changwon National University

Dec. 12, 2019 Best Paper Award, The Conference of Korea Society for Imaging Science and Technology

Feb. 13, 2014 Best Professor on Industry-Academic Cooperation, Changwon National University

Nov. 22, 2013 Best Paper Award, The Conference of Korea Society for Imaging Science and Technology

July 3, 2008 Post-Doctoral Fellowship by Korea Research Foundation (KRF), South Korea.

Oct. 25, 2004 National Science & Technology Scholarship by Korea Research Foundation (KRF), South Korea.

## REFERENCES

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Yeong Ho Ha

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## PATENTS

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- [1] Oh-Seol Kwon, "Method and apparatus for determining autonomous driving path of moving robot, and non-transitory computer readable recording medium," (**10-2022-0053653**, Apr. 2022)
- [2] Oh-Seol Kwon, "A method and apparatus of deep learning for super-resolution image restoration," (**10-2021-0169945**, Dec. 2021)
- [3] Oh-Seol Kwon, Da-Hyun Son, and Jae-Sung An, "A method and apparatus of 3D skeleton detection," South Korea. (**10-2021-0074130**, June 2021)
- [4] Oh-Seol Kwon, Su-Hwan Jo, and Hyun-Bin Bae, "A method and apparatus of real-time face recognition," South Korea. (**10-2329466**, Nov. 2021)
- [5] Oh-Seol Kwon and Bum-Su Kim, "A method and apparatus for HDR image generation," South Korea. (**10-2207441**, Jan. 2021)
- [6] Oh-Seol Kwon et al., "Robot arm control system," South Korea. (**10-2112836**, May 2020)
- [7] Oh-Seol Kwon and Bo-Gun Lee, "A method and apparatus for color gamut expansion," South Korea. (**10-2099020**, April 2020)
- [8] Oh-Seol Kwon, Ki-Hun Park and Ki-Hong Jeong, "A method and apparatus for speed limit sign recognition based on image processing," South Korea. (**10-1693959**, July 2019)
- [9] Oh-Seol Kwon and Sung-Jin Kim, "Fire detection system and method using features of spatio-temporal video blocks," South Korea. (**10-1693959**, Jan. 2017)
- [10] Oh-Seol Kwon, "A method and apparatus for blocked-jagging artifact reduction using hidden markov model and principal component analysis," South Korea. (**10-1574418**, Aug. 2015)
- [11] Oh-Seol Kwon and Min-Hyuk Lee, "A method and apparatus for image dehazing," South Korea. (**10-1547059**, Aug. 2015)
- [12] Oh-Seol Kwon, "A method and apparatus for illuminant compensation based on highlight region selection," South Korea. (**10-1509992**, Apr. 2015)
- [13] Oh-Seol Kwon and Jae-Min Hwang, "A method and apparatus for Image quality improvement based on detail information," South Korea. (**10-1503606**, Mar. 2015)
- [14] 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," South Korea, 2007.

## RESEARCH PROJECTS

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- [1] Research on virtual realization and applications of artificial intelligence-based satellite imagery enhancement, funded by MSIT (Ministry of Science and ICT), Korea, under the ITRC (Information Technology Research Center) support program (RS-2024-00438409) supervised by the IITP (07/2024 ~ 01/2031)
- [2] Development of a smart sensing-based collaborative platooning mobility platform, funded by Ministry of Science and Technology. (05/2024 ~ 01/2025)
- [3] Development of Automated Mobile Robot Platform with ROS-based SLAM, funded by Ministry of Science and Technology. (04/2024 ~ 12/2024)
- [4] Development of AGV based on deep learning for smart factory, funded by Small, Medium, and Venture Business Administration. (09/2022 ~ 12/2024)
- [5] Development of multi-object recognition system using YOLO5 algorithm for autonomous

- vehicles, funded by Ministry of Science and Technology. (07/2022 ~ 12/2022)
- [6] Development of steering control method for an automated guided vehicle(AGV) using image recognition on non-flat terrain, funded by Ministry of Science and Technology. (11/2021 ~ 04/2022)
  - [7] Development of autonomous vehicles systems based on image sensors using deep learning algorithm, funded by Ministry of Science and Technology. (6/2021 ~ 11/2021)
  - [8] Research of Image Signal Processing and Image Quality Analysis for Micro-LED Displays, funded by National Research Foundation of Korea. (6/2019 ~ 2/2022)
  - [9] Real-time Low-resolution Face Recognition Systems Based on Deep Learning Algorithm, funded by Ministry of Science and Technology. (7/2019 ~ 12/2019)
  - [10] Research of Image Conversion Technology for Next QD-HDR Displays, funded by National Research Foundation of Korea. (6/2016 ~ 5/2019)
  - [11] Embedded system development of speed limit sign recognition for high-speed vehicles, funded by Ministry of Science and Technology. (7/2018 ~ 12/2018)
  - [12] Development of Super Resolution Algorithm and System for Face Recognition in CCTV images, Embedded system development of speed limit sign recognition for high-speed vehicles, funded by Ministry of Science and Technology. (8/2017 ~ 12/2017)
  - [13] Development of recognition algorithms and embedded system for auto driving cars, funded by Ministry of Science and Technology. (8/2016 ~ 12/2016)
  - [14] Development of face recognition module and systems for indoor and outdoor environments, funded by Small and Medium Business Administration. (11/2015 ~ 10/2016)
  - [15] Development of image enhancement algorithm for 3D SMART TV based on next OLED displays, funded by National Research Foundation of Korea. (5/2012 ~ 4/2015)
  - [16] Development of prior danger sensing system for switchboard, funded by Small and Medium Business Administration. (6/2014 ~ 12/2014)
  - [17] Research on surface reflectance modeling for next-generation multi-primary systems, funded by Korea Research Foundation. (10/2008 ~ 9/2009)
  - [18] Development of reproduction technology for panoramic video based on color matching, funded by Samsung Advanced Institute of Technology. (8/2006 ~ 7/2007)
  - [19] Enhancement of image quality based on color appearance model in PDP TVs, funded by LG Electronics Inc. (2/2005 ~ 10/2005)
  - [20] Development of spectro-radiometric characteristic tool of camera, funded by Electronics and Tele-communications Research Institute. (7/2004 ~ 11/2004)
  - [21] Software development for analysis of image quality, funded by Electronics and Tele-communications Research Institute. (7/2003 ~ 12/2003)

## LIST OF PUBLICATIONS

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### **International Journals**

- [1] Yogendra Rao Munusuri, Changwon Kim, Oh Seol Kwon, and Sun-Yuan Kung, "Object Detection Using ESRGAN with a Sequential Transfer Learning on Remote Sensing Embedded Systems," *IEEE Access* will be accepted.
- [2] Yogendra Rao Munusuri, Oh Seol Kwon, and Sun-Yuan Kung, "Cross-transfer learning for enhancing object detection in remote sensing images, *IEEE Geoscience Remote Sensing Letters*, May 2024.
- [3] Yogendra Rao Munusuri and Oh Seol Kwon, "Super-resolution using deep residual network with spectral normalization," *IET Electronics Letters*, vol. 59, no. 3, Feb. 2023.
- [4] Yogendra Rao Munusuri, Oh Seol Kwon, and Sun-Yuan Kung, "SRODNet: Object Detection

- Network Based on Super Resolution for Autonomous Vehicles,” *Remote Sensing*, vol. 14, no. 24, pp. 1-19, Dec., 2022.
- [5] Yogendra Rao Munusuri and Oh Seol Kwon, “Haze removal based on refined transmission map for aerial image matching,” *Applied Science*, vol. 10, pp.1-16, Jul., 2021.
- [6] Yogendra Rao Munusuri and Oh Seol Kwon, “State estimation using a randomized unscented Kalman filter for 3D skeleton posture,” *Electronics*, vol. 10, pp.971-983, Apr., 2021.
- [7] Yogendra Rao Munusuri and Oh Seol Kwon, “Deep residual dense network for single image super-resolution,” *Electronics*, vol. 10, pp.555-569, Feb., 2021.
- [8] Oh Seol Kwon, “Illuminant-invariant face recognition using high-order local derivative pattern,” *Journal of Imaging Science and Technology*, vol. 62, no. 1, pp. 10501-1-10501-7, Jan., 2018.
- [9] Oh Seol Kwon, “Image enhancement based on multiple layers histogram equalization for detail emphasis,” *Journal of Imaging Science and Technology*, vol. 58, no. 5, pp.0505051-0505055, Sep. 2015.
- [10] Oh Seol Kwon, “Single image dehazing based on hidden markov random field and expectation-maximization,” *IET Electronics Letters*, vol. 50, no. 20, pp. 1442-1444, Sep. 2014.
- [11] Min-Hyuk Lee and Oh Seol Kwon, “Image haze removal based on transmission map using hidden markov random field model,” *IEICE Trans. Fundamentals*, vol. E97-A, no. 8, pp.1820-1822, Aug. 2014.
- [12] Wang-Jun Kyung, Dae-Chul Kim, Oh Seol Kwon, and Yeong Ho Ha, “Correction of faded colors in an image using integrated multiscale gray world algorithm,” *Journal of Imaging Science and Technology*, vol. 56, no. 6, pp. 060505\_1-060505\_14, Nov. 2013.
- [13] Oh Seol Kwon and Cheol Woo Jo, “Color constancy algorithm without segmentation,” *IEICE Electronics Express*, vol. 10, no.12, pp.1 -7, July 2013.
- [14] Oh Seol Kwon and Yeong Ho Ha, “Panoramic video using scale-invariant feature transform with embeded color-invariant values,” *IEEE Transactions on Consumer Electronics*, vol 56, no. 2, pp.792 -798, May 2010.
- [15] 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.
- [16] 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.
- [17] Tae Hyoung Lee, Oh Seol Kwon, Tae Yong Park, and Yeong Ho Ha, “Hue Shift Model and Hue Correction in High Luminance Display,” *Journal of Imaging Science and Technology*, vol. 52, no. 2, pp. 020602-1 - 020602-10, Mar./Apr. 2008.
- [18] 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.
- [19] 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.
- [20] 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.
- [21] 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.

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

- [1] Oh Seol Kwon, "Vehicle Detection Algorithm Using Super Resolution Based on Deep Residual Dense Block for Remote Sensing Images," *Journal of Broadcasting and Media Engineering*, vol. 27, no. 1, pp. XX-XX, Jan. 2023.
- [2] Oh Seol Kwon, "Body Skeleton Estimation using Noise Compensation Method on Kinetic Sensors," *The Journal of Korean Society for Imaging Science and Technology*, vol. 27, no. 3, pp. 109-114, Sep. 2021.
- [3] Oh Seol Kwon, "Noise reduction method using randomized unscented Kalman filter for RGB+D camera sensors," *Journal of Broadcasting and Media Engineering*, vol. 25, no. 5, pp. 808-811, Sep. 2020.
- [4] Hyun Bin Bae and Oh Seol Kwon, "Untact face recognition system based on super-resolution in low-resolution images," *Journal of Korea Multimedia Society*, vol. 23, no. 3, pp. 412-420, Mar. 2020.
- [5] Oh Seol Kwon, "Real-time low-resolution face recognition algorithm for surveillance systems," *Journal of Broadcasting and Media Engineering*, vol. 25, no. 1, pp. 105-108, Jan. 2020.
- [6] Oh Seol Kwon, "Speed sign recognition using sequential cascade adaboost classifier with color features," *Journal of Broadcasting and Media Engineering*, vol. 6, no. 4, pp. 221-228, Dec. 2019.
- [7] Hae In Ha and Oh Seol Kwon, "Single image dehazing using dark channel prior and patch recurrence," *The Journal of Korean Society for Imaging Science and Technology*, vol. 25, no. 4, pp. 78-84, Dec. 2019.
- [8] Ki Hun Park and Oh Seol Kwon, "Algorithm for speed sign recognition using color attributes and selective region of interest," *Journal of Broadcasting and Media Engineering*, vol. 23, no. 1, pp. 1-11, Jan. 2018.
- [9] Oh Seol Kwon, "Robust feature matching using haze removal based on transmission map for aerial images," *Journal of Korea Multimedia Society*, vol. 19, no. 8, pp. 1281-1287, Aug. 2016.
- [10] Oh Seol Kwon, "Image matching based on robust feature extraction for remote sensing haze images," *Journal of Broadcasting and Media Engineering*, vol. 22, no. 1, pp. 272-275, Mar. 2016.
- [11] Sung Woo Choi and Oh Seol Kwon, "Face recognition using high-order local pattern descriptor and DCT-based illuminant compensation," *Journal of Broadcasting and Media Engineering*, vol. 21, no. 1, pp. 51-59, Jan. 2016.
- [12] Jae Min Hwang and Oh Seol Kwon, "Image enhancement using intensity deviation of boundary regions," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 51, no. 12, pp. 140-149, Dec. 2014.
- [13] Seong Yeop Park and Oh Seol Kwon, "Number plate recognition enhancement of high speed vehicle using a blind deconvolution deblurring algorithm," *The Journal of Korean Society for Imaging Science and Technology*, vol. 20, no. 4, pp. 32-38, Dec. 2014.
- [14] Oh Seol Kwon, "Reduction of block artifacts of haze image and evaluation using display map," *Journal of Broadcast Engineering*, vol. 19, no. 5, pp. 656-664, Sep. 2014.
- [15] Oh Seol Kwon, "Illumination compensation based on conformity assessment of highlight regions," *Journal of Broadcast Engineering*, vol. 19, no. 1, pp. 75-82, Jan. 2014.
- [16] Min Hyuk Lee and Oh Seol Kwon, "Image dehazing using transmission map based on hidden markov random field model," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 51, no. 1, pp.145-151, Jan. 2014.
- [17] Oh Seol Kwon, "Jagged-blocking artifact reduction using hidden markov model and principal component analysis," *The Journal of Korean Society for Imaging Science and Technology*, vol. 19, no. 4, pp. 24-30, Dec. 2013.
- [18] Jae Min Hwang and Oh Seol Kwon, "Detail enhancement using histogram equalization with multiple layers," *Journal of Broadcast Engineering*, vol. 18, no. 5, pp. 1-8, Sep. 2013.
- [19] Oh Seol Kwon, "Image enhancement using visually optimized statistics in low-contrast images,"

- The Journal of Korean Society for Imaging Science and Technology*, vol. 19, no. 3, pp. 19-26, Sep. 2013.
- [20] Oh Seol Kwon, "Surface reflectance models and color reproduction based on multi-dimensional characteristic functions," *The Journal of Korean Society for Imaging Science and Technology*, vol. 18, no. 4, pp. 8-15, Dec. 2012.
- [21] Oh Seol Kwon, "Illumination compensation using chromatic noise modeling based on virtual responses," *The Journal of Korean Society for Imaging Science and Technology*, vol. 18, no. 2, pp. 1-8, Jun. 2012.
- [22] Oh Seol Kwon, "New N-dimensional basis functions for modeling surface reflectance," *Journal of Broadcast Engineering*, vol. 17, no. 1, pp. 196-199, Jan. 2012.
- [23] 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. 89-97, Mar. 2009.
- [24] Oh Seol Kwon, Kyung Woo Ko, and Yeong Ho Ha, "Characterization and Color Reproduction Based on the 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.
- [25] 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 The Institute of Electronics Engineers of Korea*, vol. 45, no. 1, pp. 1-10, Jan. 2008.
- [26] 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.
- [27] 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.
- [28] 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, July 2007.
- [29] Kee Hyun Park, Oh Seol Kwon, Chang Hwan Son, and Yeong Ho Ha, "Mobile LCD Characterization using XYZ Electro-Optical Transfer Functions for RGB-CMYK Components," *The Journal of The Institute of Electronics Engineers of Korea*, vol. 43, no. 6, pp. 1-10, Nov. 2006.
- [30] 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.
- [31] Oh Seol Kwon, Chang Hwan Son, Tae 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, June 2006.
- [32] 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.
- [33] 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, July 2005.
- [34] 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.
- [35] 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.

- [36] 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.

### **International Conferences**

- [1] Yogendra Rao Munusuri and Oh Seol Kwon, "Single Image Super-Resolution Using Deep Residual Network with Spectral Normalization," International Conference of Multimedia Information Technology Application, Jeju, Korea, pp.1-2, Jul. 2021.
- [2] Yogendra Rao Munusuri and Oh Seol Kwon, "Noise Reduction based on Randomized Unscented Kalman Filter for the RGB and Depth Cameras," International Conference of Multimedia Information Technology Application, Yeosu, Korea, pp.1-2, Nov. 2020.
- [3] Oh Seol Kwon, "Face Recognition Based on Deep Learning Method and Sparse Representation," Annual Conference on Engineering and Applied Science, Fukuoka, Japan, pp.3185-321, Nov. 2017.
- [4] Bong-Seok Choi, Dae-Chul Kim, Oh Seol Kwon, Yeong-Ho Ha, "Acquisition of Multi-spectral Flash Image Using Optimization Method via Weight Map," Electronic Imaging 2013, San Fransisco, CA, U.S.A., pp.86520U1 -86520U7, Feb. 2013.
- [5] Oh Seol Kwon, Holly E. Gerhard, and Laurence T. Maloney, "Surface Reflectance Models Based on Characteristic Functions," *CGIV 2010 - Fifth European Conference on Colour in Graphics, Imaging, and MCS/10 Vision 12th International Symposium on Multispectral Colour Science*, Joensuu, Finland, pp.560-565, June 2010.
- [6] Dong Chang Lee, Oh Seol Kwon, Kyung Woo Ko, Ho Young Lee, and Yeong Ho Ha, "Image mosaicking Using Local Descriptor Based on Color Invariants," *Electronic Imaging 2008*, San Jose, CA, U.S.A., pp. 681414-1 - 681414-9, Jan. 2008.
- [7] 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.
- [8] Tae Hyung Lee, Kee Hyon Park, Oh Seol Kwon, and Yeong Ho Ha, "Hue-Shift Modeling and Correction Method for High-Luminance Display" *IEEE International Conference on Image Processing(ICIP2007)*, San Antonio, Texas, U.S.A., pp. 2419-2422, Sep. 2007.
- [9] 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.
- [10] 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.
- [11] Tae Yong Park, Oh Seol Kwon, Myoung Yeong Lee, and Yeong Ho Ha, "Improved Multi-level Screening with MJBNM for Smooth Tone Transition," *The 6th Japan-Korea Joint Symposium on Imaging Materials and Technologies 2005*, Korea, pp. 1-7, Dec. 2005.
- [12] 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.
- [13] 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.



- [14] 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.