

Seo Hae Jong

University of California, Santa Cruz
Electrical Engineering Department Baskin
School of Engineering
1156 High Street
Santa Cruz, CA 95064
(831) 459-4141
hseo@ucsc.edu / rokaf@soe.ucsc.edu
<http://users.soe.ucsc.edu/rokaf>

809 Koshland Way
Santa Cruz, CA 95064

- EDUCATION**
- ◇ **University of California, Santa Cruz (2006 – Present)**, Santa Cruz, CA.
Ph.D. Candidate in Electrical Engineering
 - ◇ **Sungkyunkwan University(2005 – 2006)**, Seoul, South Korea.
M.S. degree in Electrical Engineering
Thesis title: *Common Image Method(Nullspace+2DPCA) for Face Recognition*.
Research focused on face recognition and facial expression recognition. Thesis supervised by Prof. Joong Kyu Kim. GPA : 4.43/4.5
 - ◇ **Sungkyunkwan University(1997 – 2005)**, Seoul, South Korea.
B.S. degree in Electrical Engineering
Research focused on a real-time face detection system based on Adaboost algorithm. Thesis supervised by Prof. Joong Kyu Kim. GPA: 3.91/4.5
- RESEARCH INTERESTS**
- ◇ Training-free Non-parametric Object Detection using Local Regression Kernel Descriptors in 2- and 3-D
 - ◇ Object Category Classification (Action Recognition) using Local Regression Kernel Descriptors in 2- and 3-D
 - ◇ Space-Time Saliency Detection
 - ◇ Irregularity detection in medical data
 - ◇ Image and video denoising
 - ◇ Super-resolution
 - ◇ Image and video quality assessment
 - ◇ Video summarization
- RESEARCH PROJECTS**
- ◇ **Korea Electronics Technology Institute(2004 – 2006)**
Digital Signal Processing Lab., Sungkyunkwan University
Research assistant position with Prof. Joong Kyu Kim. Research focused on development of real-time face tracking and facial expression recognition systems. Face detection system was patented.
 - ◇ **Samsung Electronics(2005)**
Digital Signal Processing Lab., Sungkyunkwan University
Research assistant position with Prof. Joong Kyu Kim. Research focused on development of a real-time PDA face recognition system. Face recognition system was patented.
- PATENTS**
- [1] Hae Jong Seo, Young kyung Park, Joong Kyu Kim, “An Adaptive Face Detection System Based on Learning”
Patent Number: 10-2004-00113139/ 10-0621883-0000
Date of Patent: Dec/27/2004/ Sep/01/2006

[2] Hae Jong Seo, Young kyung Park, Joong Kyu Kim, "Face Normalization Method and Recognition System In a PDA Phone"
Patent Number: P2005-0087284/ 10-0725771-0000
Date of Patent: Sep/20/2005/ May/30/2007

- SKILLS ◇ **Programming Languages:** C/C++ (ANSI, Visual C++/MFC), Visual Basic, Java
 ◇ **Programming Tools:** Matlab
 ◇ **Tools:** Adobe Photoshop, Adobe premiere
- AWARDS ◇ **Best Student paper(2004/2006)**
 Sungkyunkwan University , Electrical Engineering
- JOURNAL
ARTICLES [1] Hae Jong Seo, and Peyman Milanfar, "Training-free, Generic Object Detection using Locally Adaptive Regression Kernels", Accepted for publication in IEEE Trans. on Pattern Analysis and Machine Intelligence, June 2009
 [2] Hae Jong Seo, and Peyman Milanfar, "Generic Action Recognition from a Single Example", Submitted to International Journal of Computer Vision, 2009
 [3] Hae Jong Seo, and Peyman Milanfar, "Static and Space-time Visual Saliency Detection by Self-Resemblance", Submitted to Journal of Vision, 2009
- CONFERENCE
PAPAERS [1] Hae Jong Seo, and Peyman Milanfar, "Detection of Human Actions From A Single Example", Accepted for IEEE International Conference on Computer Vision (ICCV), Kyoto, Japan, Sep, 2009
 [2] Hae Jong Seo, and Peyman Milanfar, "Nonparametric Bottom-Up Saliency Detection by Self-Resemblance", Accepted for IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 1st International Workshop on Visual Scene Understanding (ViSU09), Miami, June, 2009
 [3] Hae Jong Seo, and Peyman Milanfar, "A Non-parametric Approach to Automatic Change Detection in MRI Images of The Brain", Accepted for IEEE International Symposium on Biomedical Imaging: From Nano to Macro, Boston, June, 2009
 [4] Hae Jong Seo, and Peyman Milanfar, "Using Local Regression Kernels for Statistical Object Detection", Proceedings of IEEE International Conference on Image Processing (ICIP), San Diego, 2008
 [5] Hae Jong Seo, and Peyman Milanfar, "Video Denoising Using Higher Order Optimal Space-Time Adaptation", Proceedings of IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), pp. 1249-1252, Las Vegas, NV, March 2008.
 [6] Hiroyuki Takeda, Hae Jong Seo, and Peyman Milanfar, "Statistical Approaches to Quality Assessment for Image Restoration", Invited paper in Proceedings of the International Conference on Consumer Electronics, Las Vegas, NV, January 2008.
 [7] Hae Jong Seo, Priyam Chatterjee, Hiroyuki Takeda, and Peyman Milanfar, "A Comparison of Some State of the Art Image Denoising Methods", Proceedings of the 41st Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, November 2007.
 [8] Hae Jong Seo, Young kyung Park, Joong Kyu Kim, "Common Image Method (Nullspace+2DPCA) for Face Recognition", Advanced Concepts for Intelligent Vision Systems(Acvis '06)
 [9] Hae Jong Seo, Young kyung Park, Joong Kyu Kim, "Common Image Method for Both Face Identification and Authentication", International Conference on Computer and Communication Engineering(ICCCE '06)
- THESIS Hae Jong Seo *Common Image Method(Nullspace+2DPCA) for Face Recognition*, M.S.Thesis, School of Information and Communication Engineering. Sungkyunkwan University, 2006

Seo Hae Jong

Hae Jong Seo *A real-time face detection system based on AdaBoost Algorithm*, B.S.Thesis,
School of Information and Communication Engineering, Sungkyunkwan University, 2006

REFERENCE Available on request.