Hongki Lim

Education

University of Michigan, Ann Arbor Sep 2015 - Present
Master of Science in Electrical and Computer Engineering, GPA 3.81/4.0
Relevant coursework: Medical Imaging, Nonlinear Programming, Image Processing, Foundations of Computer Vision, Advanced Topics In Computer Vision, Machine Learning, Probability and Random Processes, Matrix Methods for Signal Processing and Machine Learning

Inha University Feb 2006 - Aug 2012
Bachelor of Science in Electrical Engineering, GPA 3.74/4.5

Research Experience

University of Michigan August 2016 - Present
Advised by Prof. Jeffrey Fessler and Prof. Yuni Dewaraja
Medical imaging research, including project on Y-90 SPECT reconstruction.

University of Michigan May 2016 - August 2016
Advised by Prof. Jason Corso and Prof. Chenliang Xu
Computer vision research, including projects on LSTM variant and video understanding.

Work Experience

Qualcomm *Internship* Feb - Jun 2015
Computer Vision Group, Corporate Research & Development
Built datasets and evaluated Snapdragon computer vision engine. Investigated the feasibility of Snapdragon computer vision engine's new features. Analyzed competitors computer vision applications. Wrote one patent draft for internal patent competition.

Samsung Electronics *Associate* Jul 2012 - Mar 2014
Technology Planning Group, Strategic Planning Team, System LSI Division
Established R&D roadmaps of video compression, network on chip and software solutions. Examined the necessity of license/royalty payment when adopting software solutions. Performed competitor analysis on their research areas. Managed technology transfer progress between Samsung Electronics divisions. Prioritized R&D project plans according to necessity, resources and profits

Samsung Electronics *Internship* Dec 2011 - Feb 2012
Technology Planning Group, Strategic Planning Team, System LSI Division
Assisted industry-university collaboration by drafting interim reports. Researched rival companies' manufacturing processes. Assessed Korean minor companies' capability for outsourcing relevant technologies

Korean Air Force *Sergeant* Jul 2009 - Aug 2011
Avionics Maintenance Battalion
Embedded security code for the identification check in aircraft avionic system.

Relevant Skills

Programming Language: **Matlab, Python**, C++
English: Scored 102 on TOEFL IBT, 322/3.5 on new GRE

Course Projects

High Dynamic Range Image Tone Mapping Using a Local Edge-Preserving Multiscale Decomposition *Report*
Image Processing, Prof. Jeff Fessler Winter 2016
Proposed the joint base-detail decomposition by considering additional constraints on detail layers.

Image Captioning Using Attention Based Recurrent Neural Networks *Report*
Advanced Topics in Computer Vision, Prof. Jason Corso Winter 2016
Proposed to exploit the spatial transformer network and gated recurrent network for image captioning.

Critiques and Implementation on Recent Image Captioning Methods *Report*
Foundations of Computer Vision, Prof. Jason Corso Fall 2015
Reproduced the method in "Deep visual-semantic alignments for generating image descriptions" published in CVPR 2015.

Awards & Scholarships

Awarded Second Place Prize for Final Project at Image Processing(EECS 556) *Article* Apr 2016
Awarded Scholarship for High Score on TOEIC Fall 2011
Awarded First Place Prize at Control System Design Contest Fall 2008
Awarded Scholarship from School of Logistics Spring 2007
Awarded Semester High Honors Spring, Fall 2006

Extracurricular Activities

Intervarsity Christian Fellowship Sep 2006 - Current
Three times of mission trips to Nanning in China Summer 2006-2008
Soccer, Music Composition Current