Juyong Kim

GHC 8208, 5000 Forbe Ave, Pittsburgh PA 15213

Homepage: http://juyongkim.com   Email: juyongk@andrew.cmu.edu

Education

Machine Learning Department, Carnegie Mellon University	Sep. 2018 – Current
· Ph.D. student in Machine Learning	
Vision & Learning Lab., Seoul National University (GPA: 4.18/4.3)	Mar. 2016 – Feb. 2018
· M.S. in Computer Science and Engineering	
· Advisor: Prof. Gunhee Kim	
Seoul National University (GPA: 4.06/4.3 GPA in major: 4.12/4.3)	Mar. 2008 – Feb. 2015
· B.S. in Electrical and Computer Engineering(Summa Cum Laude)	
· Received Best Engineering Graduate Student Award	
Gyeongnam Science High School	Mar. 2006 – Feb. 2008
· A special purpose high school for scientifically gifted students.	
· Physics Major. 1 year early graduation	

Work and Research Experiences

AITRICS, Seoul, Korea	Mar. 2018 – Jul. 2018
· Research Scientist Internship	
Vision & Learning Lab., Seoul National University	Sep. 2015 – Feb. 2018
· Research Assistant and Master student	
· Working on Deep Learning(CNN), under the Supervision of Prof. Gunhee Kim(SNU) and Sungju Hwang(UNIST)	
· "SplitNet: Learning to Semantically Split Deep Networks for Parameter Reduction and Model Parallelization", "Taxonomy-Regularized Semantic Deep Convolutional Neural Networks" (See Publications below.)	
IR-Link, Seoul, Korea	Nov. 2012 – Jul. 2014
· Software Engineer (As alternative military service)	
· Mobile Web Application Development / Windows Application Development (See Skills below.)	
ITWell, Seoul, Korea	Sep. 2011 – Oct. 2012
· Software Engineer (As alternative military service)	
· Windows CE Application Development	
Cyber-Physical Systems Lab., Seoul National University	Jan. 2011 – Sep. 2011
· Undergraduate Researcher on Robotics, Computer Vision, under the Supervision of Prof. Songhwai Oh	
· "Actionable Topological Mapping for Navigation Using Nearby Objects" (See Publications below.)	

Publications

International Conferences

· **Juyong Kim**, Y. Park, G. Kim, S. Hwang, "*SplitNet*: **Learning to Semantically Split Deep Networks for Parameter Reduction and Model Parallelization**", in *International Conference on Machine Learning (ICML)*, Aug. 2017.

· W. Goo, **Juyong Kim**, G. Kim, S. Hwang, "**Taxonomy-Regularized Semantic Deep Convolutional Neural Networks**", in *European Conference on Computer Vision (ECCV)*, Oct. 2016.

· J. Kim, **Juyong Kim**, S. You, Y. Oh, and S. Oh, "**Actionable Topological Mapping for Navigation Using Nearby Objects**," in *Proc. of the IEEE International Conference on Automation Science and Engineering (CASE)*, Aug. 2012.

Honors and Awards

ILJU Overseas Ph.D. Scholarship	Aug. 2018 – Current
· Supporting outstanding PhD students studying abroad.	
Hyundai Motor Chung Mong-Goo Scholarship	Mar. 2016 – Feb. 2018
· Full tuition & fees during my Master's degree program.	
NVIDIA Deep Learning Contest 2016(Korea)	Oct. 2016
· 2nd place in Free Topic.	

Silver Prize in 25th Global Software Contest Exhibit   Dec. 2013
· Hosted by Ministry of Science ICT and Future Planning, Korea.
· Mobile Voting Service (MVS - Korean) ([Certificate](#))

National Science and Engineering Scholarship   Mar. 2008 – Feb. 2015
· Full tuition & fees during my college life, Funded by Korea Student Aid Foundation.

Korea Physics Olympiad   Dec. 2007
· Silver Medal ([Certificate](#))

JeongSan Science Talent Scholarship   2006 – 2007
· $3,000/year during my high school years, funded by JeongSan Scholarship Foundation.

Research Interests

· Machine Learning, Deep Learning Architecture(especially in CNN), Computer Vision, Large-scale Visual Recognition, AI, Robotics

Teaching Experiences & Extracurricular Activities

Teaching Assistant, Seoul National University   1st semester, 2016
· M1522.001000 Computer Vision

Tutor, Seoul National University   1st semester, 2010
· Selected as a Physics tutor

Tutor, Gyeongnam Science High School   Jul. 2008, Jan. 2009
· Selected as a Physics tutor

President, Neophysics, Gyeongnam Science High School   Oct. 2006 – Feb. 2008
· Club for students gifted in physics

Skills

Relevant Coursework
· 420.314 Introduction to Random Variables Processes
· 420.216 Linear Algebra for Electrical Systems
· 420.211 Programming Methodology
· 420.327 Data Structures and Algorithms
· 420.310 Fundamentals of Control Engineering
· 420.456 Advanced Control Techniques
· 446.345 Introduction to Robot Engineering
· 4190.408 Artificial Intelligence
· 420.405 Design Project for Electrical Devices & Systems
· 430.714 Estimation Theory
· 430.457 Introduction to Intelligent Systems
· 430.711A Introduction to Computer Vision
· 430.659 Topics in Computer and VLSI(Machine Learning)
· 406.563 Convex Optimization
· 4190.681A Genetic Algorithms
· M1522.001300 Probabilistic Graphical Models
· 4190.678 Natural Language Processing

Programming Language/Library
· C++, Java, Python, C#, MATLAB, Mathematica, SQL, Verilog.
· TensorFlow, Caffe, Theano, OpenCV, MFC, Web development(w. Spring Framework), .Net Application, HTK Speech Recognition Toolkit, Android, etc.