Juyong Kim

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Education

Machine Learning Department, Carnegie Mellon University

Ph.D. student in Machine Learning
Advisor: Prof. Pradeep Ravikumar

Vision & Learning Lab., Seoul National University

Mar. 2016 – Feb. 2018

Mar. 2016 – Feb. 2018

Advisor: Prof. Gunhee Kim

Seoul National University

B.S. in Electrical and Computer Engineering(Summa Cum Laude)

Received Best Engineering Graduate Student Award

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.)

Research Interests

• Machine Learning, Deep Learning Architecture (especially in CNN), Clinical Natural Language Processing, Computer Vision

Publications

International Conferences

- <u>Juyong Kim</u>, 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, <u>Juyong Kim</u>, G. Kim, S. Hwang, "Taxonomy-Regularized Semantic Deep Convolutional Neural Networks", in *European Conference on Computer Vision (ECCV)*, Oct. 2016.
- J. Kim, <u>Juyong Kim</u>, 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)

National Science and Engineering Scholarship

Mar. 2008 – Feb. 2015

• Full tuition & fees during my college life, Funded by Korea Student Aid Foundation.

Teaching Experiences & Extracurricular Activities

Teaching Assistant, Carnegie Mellon University

Fall, 2019

10-715 Advanced Introduction to Machine Learning

Teaching Assistant, Seoul National University

Spring, 2016

• M1522.001000 Computer Vision

Skills

Relevant Coursework

- 420.314 Introduction to Random Variables Processes
- 420.211 Programming Methodology
- 420.310 Fundamentals of Control Engineering
- 446.345 Introduction to Robot Engineering
- 420.405 Design Project for Electrical Devices & Systems
- 430.457 Introduction to Intelligent Systems
- 430.659 Topics in Computer and VLSI(Machine Learning) 406.563 Convex Optimization
- 4190.681A Genetic Algorithms
- 10-716 Advanced Machine Learning

- 420.216 Linear Algebra for Electrical Systems
- 420.327 Data Structures and Algorithms
- 420.456 Advanced Control Techniques
- 4190.408 Artificial Intelligence
- 430.714 Estimation Theory
- 430.711A Introduction to Computer Vision
- M1522.001300 Probabilistic Graphical Models
- 4190.678 Natural Language Processing
- 10-715 Advanced Introduction to Machine Learning

- 36-715 Intermediate Statistics
- 10-707 Topics in Deep Learning

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.

(Last update: 10/24/2019)