

Jeongyeol Kwon

CONTACT INFORMATION

EER 6.822, 2501 Speedway, The University of Texas at Austin, Austin, TX 78712
Tel: (512)981-9126 E-mail: kwonchungli@utexas.edu

EDUCATION

The University of Texas at Austin, TX

Ph.D. in Electrical and Computer Engineering. 2017.8 - present

Seoul National University (SNU), Seoul, Korea

B.S. in Electrical Engineering, GPA 4.00/4.30 2008.3 - 2016.2

Seoul Science High School, Seoul, Korea

High school diploma with distinction in 2 years 2006.3 - 2008.2

RESEARCH INTERESTS

Machine learning, large-scale optimization, statistical learning, robust statistics and applications to deep learning.

PUBLICATION

J. Kwon, Q. Wei, C. Caramanis, Y. Chen, and D. Davis, “Global Convergence of EM Algorithm for Mixtures of Two Component Linear Regression,” *To appear in the proceedings of the Conference on Learning Theory (COLT)*, 2019.

RESEARCH EXPERIENCE

DICE (Decision, Information, and Communications Engineering), The University of Texas at Austin, TX

Graduate Research Assistant (Prof. Constantine Caramanis) 2018.1 - present

- Analysis on the EM algorithm for a mixture of linear regressions.
- Adversarial Examples: Robustifying DNN classifier to malicious perturbation on test image

PIL (Perceptron and Intelligence Laboratory), Seoul National University

Research Internship (Prof. Jin Young Choi) 2016.7 - 2017.4

- Multi-camera multi-object tracking in computer vision with network-flow formulation
- Group study on various first-order optimization methods.

Design Project for Electrical Engineering, Seoul National University

Course Project: Computer Vision (Prof. Nam Ik Choi) 2014.8 - 2014.12

- Image-dehazing with prior knowledge on the natural scene.

WORK EXPERIENCE

Scientific Analog, Seoul, Korea

R&D Engineer, Program Developer for Mixed Circuit Simulator 2015.5 - 2016. 6

- Develop core module: first-order difference equation (ODE) solver for analog circuit
- Applied model-order reduction technique for faster simulation speed
- Develop scheduler and processor for events in the circuit system in a time order
- Development language: C/C++, Python, Verilog

Redduck, Inc., Seoul, Korea

Programmer, PC Game Client Developer

2011.2 - 2013.12

- Develop FPS game client in PC environment with Unreal 3 Engine
- Development language: C/C++

TEACHING EXPERIENCE

The University of Texas at Austin, Austin, TX

Teaching Assistant, EE 381V, Large Scale Optimization

Fall 2018

Teaching Assistant, EE 381V-SE, Introduction to Convex Optimization

Spring 2018

Seoul National University, Seoul, Korea

Teaching Assistant, Convex Optimization

Fall 2016

HONORS AND AWARDS

Graduate Study Scholarship, The Kwanjeong Educational Foundation,

2017 - 2021

- Four-year scholarship for doctorate program.

President Scholarship for Undergraduate, Korea Student Aid Foundation

2008 - 2014

- Four-year scholarship for undergraduate program.

International Collegiate Programming Contest, Association for Computing Machinery 2010

- 6th Place in Daejeon Region
- 2nd Place in Hanoi Region

Korea Olympiad in Informatics, Ministry of Science, ICT and Future Planning

2007

- Gold in Area of High School

Korea Physics Olympiad, The Korean Physical Society

2007

- Silver in Area of High School

OTHER

- Language: English, Japanese
- Specialty: Algorithm/Data Structure, Learning Theory, Optimization
- Computer Skills: C/C++, Python, MATLAB, \LaTeX