

Kiyoon Kim http://kiyoon.kim/

Hello, I'm a computer engineer with machine learning and signal processing background.

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EDUCATION

Ulsan National Institute of Science and Technology (UNIST)

Ulsan, South Korea Mar 2014 – Feb 2018

Dec 2017

Bachelor in Electrical Engineering, Computer Science and Engineering

o Contribution Award¹: Chairman's Award

o GPA of Computer Science and Engineering: 4.15/4.3 (97.5/100)

o GPA of Electrical Engineering: 3.94/4.3 (95.4/100)

o GPA of both majors: 4.00/4.3 (96.0/100)

o Total Grade Point Average: 3.79/4.3 (93.9/100)

SCHOLARSHIPS

Currency measure: 1 USD = 1,079.93 KRW (23 Feb, 2018)

NAVER UNIST Undergraduate Poster Award (NAVER UUPA)

NAVER Corp., UNIST

₩2,500,000 (\$2,315)

UC Berkeley Entrepreneurship Programme
UNIST

 $\Psi 9,975,200 \; (\$ 9,237)$ Jan 2017 – Mar 2017

• Living Scholarship

₩2,140,000 (\$1,982)

Mar 2016 - Dec 2017

All

Allowance UNIST

 $442,517,600 \ (\$2,331)$ Mar 2016 – Dec 2017

National Science & Engineering Scholarship

Korea Student Aid Foundation

 $4412,588,000 \; (\$11,656)$ Mar 2016 – Dec 2017

Korea Supercomputing Challenge (KSC 2015)

#500,000 (\$463) (shared by 2 members)

KISTI Supercomputing Education Center
Oct 2015

HeXATHON UNIST, NAVER Corp.

₩1,500,000 (\$1,389) (shared by 4 members)

May 2015

Tutor for Engineering Programming I (3 semesters)

UNIST

• ₩1,200,000 (\$1,111)

Sep 2014 - Dec 2015

Academic Performance Scholarship UNIST

 $2014 - Dec\ 2015$

¹Students who have shown especially good behaviour or enhanced the university's honour can be given a contribution award. The contribution award winner shall be selected by deliberation of the Committee based on recommendations from the head of the school (department) in each school (department). In 2018, among 704 undergraduates from various departments, 6 people have been awarded.

PUBLICATIONS

- M. S. Ryoo, <u>K. Kim</u> and H. J. Yang, "Extreme Low Resolution Activity Recognition with Multi-Siamese Embedded Learning," *AAAI Conference on Artificial Intelligence*, New Orleans, Louisiana, February 2018. [acceptance rate: 24.6%] https://arxiv.org/pdf/1708.00999.pdf
- Patent: Falling out of hair management system https://patents.google.com/patent/KR20140094301A/en

EXPERIENCE

NAVER UNIST Undergraduate Poster Award (NAVER UUPA)

NAVER Corp., UNIST

Poster presentation of Extreme Low Resolution Activity Recognition: won 1st place

Dec 2017

EgoVid Inc. (http://egovid.com)

Ulsan, South Korea

Machine Learning Researcher & Developer

May 2016 - Dec 2017

- o Drone Project Manager: Autonomous drone project using ROS on NVIDIA Jetson TX2 embedded board.
- Realtime Demonstration Running on Embedded Device at CVPR 2017: Demonstrated my work running on NVIDIA Jetson TX2 and helped my colleague for implementing different demonstration about Video Anonymisation Algorithm at CVPR (Computer Vision Pattern Recognition) 2017 conference. https://youtu.be/7jkSum_pj9o?t=25s
- UC Berkeley Entrepreneurship Programme: Visited UC Berkeley Sutardja Center of Entrepreneurship & Technology for 9 weeks to exchange ideas about making a start-up company.
 UC Berkeley News Article: http://scet.berkeley.edu/keeping-personal-machine-learning-meets-egovid/
- Attended Conferences: AAAI Conference on Artificial Intelligence 2017, San Francisco, California, USA
 Asilomar 2016, Pacific Grove, California, USA
 Ubicomp 2016, Heidelberg, Germany
- Linux GPU Computing Server Setup for Machine Learning: Installed Ubuntu Server and programs needed for machine learning and sharing devices with multiple users. VNC remote desktop, Docker and Virtualenv.
- Study: Machine Learning and Computer Vision: Studied machine learning and computer vision with Coursera, Udacity courses.
- Study: OFDM Radar Signal Processing: Studied OFDM radar signal processing for possible future work in radar classification machine learning problem.

Private Teaching Personal

Taught Computer Science and Engineering subjects to two university students.

Mar 2016 - Dec 2016

- Object Oriented Programming (C++)
- Data Structure (C++)
- o Principles of Programming Languages (SML, Racket, Python)

Private Teaching Personal

Taught C Language to a pre-high school student.

Jan 2016 - Feb 2016

USPTO Patent Information Crawler

UNIST

Dec 2015 - Apr 2016

Developed in Python for building custom database.

Dec 2010 11pt 2010

KISTI Supercomputing Education Center

MPI parallel computing competition: won 5th place

Intel Xeon Phi optimisation, parallelisation education

Korea Supercomputing Challenge (KSC 2015)

Oct 2015
Intel Corp.

Completed the education with practices about OpenMP, Vectorisation, and Intel compiler.

Aug 2015

Personal Linux Server Buildup

Personal

 $Fedora\ server\ buildup\ for\ personal\ use$

 $Aug\ 2015$

- \circ File cloud & synchronisation server
- Multimedia streaming server
- Web server (Gitlab, URL Shortener)

WISET Startup Springboard

UNIST

Completed the entrepreneurship programme.

Aug 2015

Private Teaching Personal

Taught mathematics to a high school student. July 2015 - Aug 2015

UNIST, NAVER Corp. **HeXATHON**

QR code waiting system implemented with Raspberry Pi: won 1st place May 2015

UNIST Startup Clinic UNIST, NAVER Corp.

Smart home app controlling electric output Mar 2015

Private Teaching Personal

Taught physics to a pre-high school student. Jan 2015 - Feb 2015

Tutor for Engineering Programming I UNIST Taught the subject for 3 semesters, to 3 university students per semester. Sep 2014 - Dec 2015

Private Teaching Personal

Taught mathematics to a high school student. Jul 2014 - Aug 2014

Math Teacher at Private School Morning of Math

Problem-solving assistant for high school students. Jul 2014 - Aug 2014

Patent: Falling out of hair management system South Korea Hair proportion analysis algorithm implemented in CxImage and MFC. Jan 2013 - Jul 2014

Korea International Science and Engineering Fair (KISEF 2012) National Science Museum

Exhibited and Demonstrated PowerUpdater2 at Daejeon Convention Center. Jan 2012

Korea Olympiad in Informatics (KOI 2011) National Information Society Agency

Demonstrated PowerUpdater2: won bronze medal. Sep 2011 Sparkware (http://sparkware.co.kr) Personal

Personal Website Management (XpressEngine), Program Development (C++, MFC) May 2010 - Aug 2013

• PowerUpdater, PowerUpdater2: An updater program that can be customised by users easily with GUI menu.

Personal

- Waviano: Playing piano with keyboard using multiple music files.
- PowerRegister: An customisable activation program for Windows application programmers.
- o DirectoryDateName: Easily make directory with name containing current date.
- Flash programs: Simple Flash programs.

Flash programming

Studied and implemented simple Flash programs. Nov 2004 - Apr 2010

• Elementary, middle school teachers used my programs.

- Managed a blog to release some programs.
- SKILLS AND KNOWLEDGE

Deep learning, Signal processing, Linux server buildup, Machine integration, Web development, Video editing and film-making, Product design

Languages, Frameworks and Tools

C · C++ · Python · Linux Bash · TensorFlow / Keras (Machine learning) · MPI (Parallel programming) · CUDA (GPU parallel programming) · MATLAB · OpenCV · Git (Version control) · Docker · NVIDIA Jetson TX2 (Embedded board and Linux) · Raspberry Pi (IoT Linux) · MFC (Windows programming) · Java · HTML · PHP · MySQL / Maria DB · Flash action script · Processing · NXT Robot C · Xpress $Engine(Website) \cdot Wordpress(Website) \cdot LAT_{EX}$