

Kiyoon Kim http://kiyoon.kim/

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

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## EDUCATION

University of Edinburgh

MSc in Artificial Intelligence

Edinburgh, United Kingdom Sep 2018 - Sep 2019 (Estimated)

Ulsan National Institute of Science and Technology (UNIST)

Ulsan, South Korea

Bachelor in Electrical Engineering, Computer Science and Engineering: magna cum laude

Mar 2014 - Feb 2018

- o Contribution Award¹: Chairman's Award
- GPA of Computer Science and Engineering: 4.15/4.3 (97.5/100)
- 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:  $1 \text{ USD} = 1{,}127.00 \text{ KRW } (17 \text{ Oct}, 2018)$ 

NAVER UNIST Undergraduate Poster Award (NAVER UUPA)

NAVER Corp., UNIST

2017 W2,500,000 (\$2,218)

UC Berkeley Entrepreneurship Programme

₩9,975,200 (\$8,851)

₩12,588,000 (\$11,169)

Jan 2017 - Mar 2017

Mar 2016 - Dec 2017

UNIST

Living Scholarship UNIST

 $442,140,000 \ (\$1,899)$  Mar 2016 – Dec 2017

Allowance UNIST

₩2,517,600 (\$2,234)
Mar 2016 - Dec 2017

National Science & Engineering Scholarship Korea Student Aid Foundation

Korea Supercomputing Challenge (KSC 2015)

KISTI Supercomputing Education Center

₩500,000 (\$444) (shared by 2 members)

Oct 2015

HeXATHON

W1,500,000 (\$1,331) (shared by 4 members)

UNIST, NAVER Corp.

May 2015

Tutor for Engineering Programming I (3 semesters)

UNIST

• ₩1,200,000 (\$1,065)

Sep 2014 - Dec 2015

• Academic Performance Scholarship

₩12,660,000 (\$11,233)

Mar 2014 - Dec 2015

Students who have shown especially good behaviour or enhanced the university's honour can be given a contribution award. The

<sup>&</sup>lt;sup>1</sup>Students 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, K. Kim 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

Private Teaching

Personal

Taught TOEIC (English) to a job seeker.

Jul 2018 - Aug 2018

Private Teaching

Personal

Taught R Language to a master student.

Apr 2018

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
- o 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/
- o 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

Korea Supercomputing Challenge (KSC 2015)

KISTI Supercomputing Education Center

MPI parallel computing competition: won 5th place

Developed in Python for building custom database.

Oct 2015

Intel Xeon Phi optimisation, parallelisation education

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

• File cloud & synchronisation server

- o Multimedia streaming server
- Web & DB server (Gitlab, URL Shortener, Spam filtering)

### WISET Startup Springboard

UNIST

Completed the entrepreneurship programme.

Aug 2015

## Private Teaching

Personal

Taught mathematics to a high school student.

July 2015 - Aug 2015

## **HeXATHON**

UNIST, NAVER Corp.

 $\it QR\ code\ waiting\ system\ implemented\ with\ \it Raspberry\ \it Pi:\ won\ \it 1st\ place$ 

 $May\ 2015$ 

## 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 Jul 2014 – Aug 2014

Taught mathematics to a high school student.

Morning of Math

### Math Teacher at Private School

Jul 2014 - Aug 2014

Problem-solving assistant for high school students.

National Science Museum

# Korea International Science and Engineering Fair (KISEF 2012)

Jan 2012

Exhibited and Demonstrated PowerUpdater2 at Daejeon Convention Center.

National Information Society Agency

# Korea Olympiad in Informatics (KOI 2011)

San 2011

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

### Flash programming

Personal

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, Computer vision, Signal processing, Linux server buildup, Machine integration, Web development, Product design

### Languages, Frameworks and Tools

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