

Kiyoon Kim http://kiyoon.kim/

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

Email: im@kiyoon.kim

kiyoon.kim@ed.ac.uk

Mobile: +44-7494-630465

EDUCATION

The University of Edinburgh

Edinburgh, United Kingdom

PhD in Informatics: Robotics, Computer Vision, Computer Graphics and Animation Sep 2019 – Aug 2023 (Estimated)

The University of Edinburgh

Edinburgh, United Kingdom

MSc in Artificial Intelligence

Sep 2018 - Aug 2019

Ulsan National Institute of Science and Technology (UNIST)

Ulsan, South Korea

NAVER Corp., UNIST

Bachelor in Electrical Engineering, Computer Science and Engineering: magna cum laude Mar 2014 - Feb 2018

 \circ Contribution Award $^1\colon$ Chairman's Award

 $\circ \ \mathbf{GPA} \ \mathbf{of} \ \mathbf{major} \ \mathbf{subjects} \colon \ 4.00/4.3 \ (96.0/100)$

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

Publications

• M. S. Ryoo, <u>K. Kim</u> and H. J. Yang, "Extreme Low Resolution Activity Recognition with Multi-Siamese Embedding 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

•	Demonstration for Machine Learning Practical Ran lab sessions for the Machine Learning Practical (MSc module).	The University of Edinburgh Sep 2019 –
•	Tutoring for Object-Oriented Programming Ran 2 tutorial sessions of OOP Java programming tutorials with Eclipse IDE.	The University of Edinburgh Jan 2019 - Apr 2019
	• Nominated for the Best Student Who Tutors Award	
_	Tutoring for Imperative Programming Ran tutorial sessions of Java programming with Greenfoot IDE.	The University of Edinburgh
•	Ran tutorial sessions of Java programming with Greenfoot IDE.	Nov 2018
•	Private Tutoring	Personal
	Tutored TOEIC (English) to a job seeker.	$Jul\ 2018-Aug\ 2018$
•	Private Tutoring	Personal
	Tutored R Language to a master student.	Apr 2018

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

Dec 2017

NAVER UNIST Undergraduate Poster Award (NAVER UUPA)

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.

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

Machine Learning Researcher & Developer

Ulsan, South Korea 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 Tutoring Personal

Tutored 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 Tutoring Personal

Tutored C Language to a pre-high school student.

Jan 2016 - Feb 2016

USPTO Patent Information Crawler

Developed in Python for building custom database.

Dec 2015 - Apr 2016

Korea Supercomputing Challenge (KSC 2015)

KISTI Supercomputing Education Center
Oct 2015

MPI parallel computing competition: won 5th place

Intel Corp.

Aug 2015

UNIST

Intel Xeon Phi optimisation, parallelisation education

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

Personal

Personal Linux Server Buildup

Fedora server buildup for personal use

Aug 2015

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

WISET Startup Springboard

UNIST Aug 2015

Completed the entrepreneurship programme.

Personal

Private Tutoring

HeXATHON

Tutored mathematics to a high school student.

 $July\ 2015-Aug\ 2015$

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

UNIST, NAVER Corp.

May 2015

UNIST Startup Clinic

UNIST, NAVER Corp.

Mar 2015

Smart home app controlling electric output Private Tutoring

Tutored physics to a pre-high school student.

Jan 2015 - Feb 2015

Tutoring for Engineering Programming I

UNIST

Personal

Ran tutorial sessions for 3 terms.

Sep 2014 - Dec 2015

Private Tutoring Personal

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

Math Tutor at Private School

Morning of Math Problem-solving assistant for high school students Jul 2014 - Aug 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 Website Management (XpressEngine), Program Development (C++, MFC)

Personal 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.
- PowerRegister: An customisable activation program for Windows application programmers.
- Directory Date Name: 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.
- o 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

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 · R · Flash action script · Processing · NXT Robot C · Xpress Engine(Website) · Wordpress(Website) · LATEX