



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

**Kiyoon Kim**

<http://kiyoon.kim/>

Email : [im@kiyoon.kim](mailto:im@kiyoon.kim)

[kiyoon@egovid.com](mailto:kiyoon@egovid.com)

Mobile : +82-10-5133-5449

## EDUCATION

---

- **Ulsan National Institute of Science and Technology (UNIST)** Ulsan, South Korea  
*Bachelor in Electrical Engineering, Computer Science and Engineering* Mar 2014 – Feb 2018 (estimated)
  - **GPA of Computer Science and Engineering:** 4.15/4.3 (98.5/100)
  - **GPA of Electrical Engineering:** 3.89/4.3 (95.8/100)
  - **GPA of both majors:** 3.97/4.3 (96.6/100)
  - **Total Grade Point Average:** 3.77/4.3 (94.5/100)

## SCHOLARSHIPS

---

Currency measure: 1 USD = 1,092.30 KRW (13 Dec, 2017)

- **NAVER UNIST Undergraduate Poster Award (NAVER UUPA)** NAVER Corp., UNIST  
*₩2,500,000 (\$2,289)* Dec 2017
- **UC Berkeley Entrepreneurship Programme** UNIST  
*₩9,975,200 (\$9,132)* Jan 2017 – Mar 2017
- **Living Scholarship** UNIST  
*₩2,140,000 (\$1,959)* Mar 2016 – Dec 2017
- **Allowance** UNIST  
*₩2,517,600 (\$2,305)* Mar 2016 – Dec 2017
- **National Science & Engineering Scholarship** Korea Student Aid Foundation  
*₩12,588,000 (\$11,524)* Mar 2016 – Dec 2017
- **Korea Supercomputing Challenge (KSC 2015)** KISTI Supercomputing Education Center  
*₩500,000 (\$458) (shared by 2 members)* Oct 2015
- **HeXATHON** UNIST, NAVER Corp.  
*₩1,500,000 (\$1,373) (shared by 4 members)* May 2015
- **Tutor for Engineering Programming I (3 semesters)** UNIST  
*₩1,200,000 (\$1,099)* Sep 2014 – Dec 2015
- **Academic Performance Scholarship** UNIST  
*₩12,660,000 (\$11,590)* Mar 2014 – Dec 2015

## 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 – Present
  - **Drone Project Manager:** Autonomous drone project using ROS on NVIDIA Jetson TX2 embedded board.

- **Publication:** 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>
- **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](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  
*OOP (C++), Data Structure (C++), and Programming Languages (SML, Rocket, Python)* *Mar 2016 – Dec 2016*
- **Private Teaching** Personal  
*Taught C Language for pre-high school student.* *Jan 2016 – Feb 2016*
- **USPTO Patent Information Crawler** UNIST  
*Developed in Python for building custom database.* *Dec 2015 – Apr 2016*
- **Korea Supercomputing Challenge (KSC 2015)** KISTI Supercomputing Education Center  
*MPI parallel computing competition: won 5th place* *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 server
  - Multimedia streaming server
  - Git server
  - Dropbox-like synchronisation server
  - URL shortener
  - Web server
- **WISSET Startup Springboard** UNIST  
*Completed the entrepreneurship programme.* *Aug 2015*
- **Private Teaching** Personal  
*Taught mathematics for high school student.* *July 2015 – Aug 2015*
- **HeXATHON** UNIST, NAVER Corp.  
*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 for pre-high school student.* *Jan 2015 – Feb 2015*
- **Tutor for Engineering Programming I** UNIST  
*Taught the subject for 3 semesters, 3 university students per each semester.* *Sep 2014 – Dec 2015*

- **Private Teaching**  
*Taught mathematics for high school student.*
  - **Math Teacher at Private School**  
*Problem-solving assistant for high school student.*
  - **Patent: Falling out of hair management system**  
*Hair proportion analysis algorithm implemented in CxImage and MFC.*  
    - <https://patents.google.com/patent/KR20140094301A/en>
  - **Korea International Science and Engineering Fair (KISEF 2012)**  
*Exhibited and Demonstrated PowerUpdater2 at Daejeon Convention Center.*
  - **Korea Olympiad in Informatics (KOI 2011)**  
*Demonstrated PowerUpdater2: won **bronze medal**.*
  - **Sparkware (<http://sparkware.co.kr>)**
  - *Personal Website Management (XpressEngine), Program Development (C++, MFC)*
  - **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.
  - **DirectoryDateName:** Easily make directory with name containing current date.
  - **Flash programs:** Simple Flash programs.

Personal  
*Jul 2014 – Aug 2014*  
 Morning of Math  
*Jul 2014 – Aug 2014*  
 South Korea  
*Jan 2013 – Jul 2014*  
 National Science Museum  
*Jan 2012*  
 National Information Society Agency  
*Sep 2011*  
 Personal  
*May 2010 – Aug 2013*
- **Flash programming**  
*Studied and implemented simple Flash programs.*  
    - Elementary, middle school teachers used my programs.
    - Managed a blog to release some programs.

Personal  
*Nov 2004 – Apr 2010*

---

## SKILLS AND KNOWLEDGE

Deep Learning, Signal Processing, Linux server buildup, Web development, Machine integration, Video editing and filmography, Product design

---

## LANGUAGES, FRAMEWORKS AND TOOLS

C · C++ · Python · Linux Bash · TensorFlow / Keras (Machine learning) · MPI (Parallel programming) · CUDA (GPU parallel programming) · MATLAB · Git (Version control) · Docker · Raspberry Pi (IoT Linux) · MFC (Windows programming) · Java · HTML · PHP · MySQL / Maria DB · Flash action script · Processing · NXT Robot C · Xpress Engine(Website) · Wordpress(Website) · L<sup>A</sup>T<sub>E</sub>X