Hyeongkeun KIM

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EDUCATION

B.S. in Mechanical Engineering and Bio-Brain Engineering   2013 – 2020 (Expected)
Korea Advanced Institute of Science and Technology (KAIST), Republic of Korea   GPA: 3.77/4.30
- Recipient of Korea Presidential Science Scholarship, Dean's List for Creative Excellence (Fall 2014)
- Foreign study at INSA Lyon in France under Mirae Asset Scholarship for Overseas Exchange Students (Spring 2015)

EXPERIENCE

Undergraduate Student Researcher in Biomicrofluidics Lab (KAIST)   Jun. 2019 – Present
Advisor: Prof. Jessie S. Jeon   Jun. 2016 – Aug. 2016
- Designed an automated system that measures *in-situ* bacterial growth in microchannels using vision marker.
- Developed a script for designing 3D printable models of templates for lab-on-chip using a sandbox game 'Minecraft.'
- Participated in two peer-reviewed publication in *Sensors*, being a co-first author of one of them.

Lead Social Service Agent in Changwon Dongbaek School for the disabled (Military Service)   Mar. 2017 – Mar. 2019
- Assisted students with severe cerebral palsy, brain lesions and learning disabilities during school hours
- Directed and coordinated duties and resolved issues for other social service agents as the lead agent.
- Was awarded commendation by Military Manpower Administration for excellent performance as the lead agent.

Full-time Research Intern in NAVER LABS Robotics Group (NAVER LABS Corp.)   Aug. 2016 – Feb. 2017
Advisor: Dr. Sangok Seok
- Designed and optimized an indoor service robot (TuskBot) that is compatible with most stairs in existence.
- Improved structural components and remote data collection system of the autonomous personal transporter.
- My work was accepted in *IROS 2017,* and featured in annual corporate conference *DEVIEW 2017.*

Teaching Assistant, Introduction to Programming (CS101) in School of Computing (KAIST)   Fall 2015, Spring 2016
- Assisted with lab sessions, including QnAs. Graded homework assignments and exams to a class of over 350 students.

Undergraduate Student Researcher in Neuro-Rehabilitation Engineering Lab (KAIST)   Dec. 2015 – Feb. 2016
Advisor: Prof. Hyung-soon Park
- Improved control performance on wearable gait assisting device in terms of data resolution and control speed.

LEADERSHIPS & ACTIVITIES

Member in Microrobot Research(KAIST Robotics Club)   Mar. 2013 – Present
- Co-founded Team W5, a team for interdisciplinary projects between robotics and bioengineering in 2014.
- Over three years, Team W5 was awarded 15 prizes from various competitions, participated in 6 conferences in robotics, published 5 peer-reviewed publications, and featured in 2014 Intel Korea Year-End Press Conference.
- Mentored middle-schoolers about robotics and programming. (Joint program with Midam Scholarship Committee)

Vounteer in Upside Down (2015 film) (Project Together for MV Sewol Disaster Documentary)   Jun. 2014 – Oct. 2014
- Initially organized the crowdsourcing project for translating Sewol Disaster news on social media. (Apr – Jun. 2014)
- Participated in fact-checking and data-analysis.

Vice president (2014) in Freethinkers KAIST (KAIST Freethought/Secularism Club)   Mar. 2013 – Present
- Organized a joint statement against National Institute of Korean Language for anti-LGBT re-definition of 'love'.
- Successfully obtained the official student club status in KAIST via student council and secured on-campus club room.
- Coordinated international cooperation with CFI(Center for Inquiry), resulting in the affiliation with CFI on Campus.

SKILLS

- **Laboratory Techniques**: Soft lithography for microfluidics, mammalian cell culture and biological image processing
- **Programming**: MATLAB, Python, JAVA, LabView and embedded programming with STM32F4, MSP430 and AVR series
- **Software**: PyTorch, OpenCV, SolidWorks, Webots, Siemens Solid Edge and AutoCAD
- **Language**: English(Fluent, iBT TOEFL - 109, GRE - V166/Q169/W4.0), Korean (Native), French (Basic)

메모 포함[KH1]: Hi. I have been following examples mentioned in https://capd.mit.edu/sites/default/files/jobs/files/sample-resumes.pdf. Beginning with my academical CV, I skimmed out most of my academical works and included little bit more of my leadership/activity side. Since this type of resume is not used in my country of origin, any advices on this resume will be really nice!

메모 포함[KH2]: I have a study-abroad (exchange student) experience. I really don't have space for it so I omitted it. Is it okay to do so? (Just to be safe)

메모 포함[KH3]: I returned to my lab after military service (mandatory). Is it okay to mention the period in this format?

메모 포함[KH4]: I tried to summarize even more from my CV. Is it summarized too much?

메모 포함[KH5]: Should I mention it? It was a mandatory military service (It is managed by Military Manpower Admin. of Korean Gov't)

메모 포함[KH6]: I was the corresponding author and co-first author in the paper. Is it okay to call it 'my work'?

메모 포함[KH7]: Due to health reason, I had to quit the project before it was finished. Is it okay to mention here?

메모 포함[KH8]: I know it is a gamble for mentioning this, but do you think it worths it? My leadership experience is the most extensive here

SELECTED PUBLICATIONS

1. K. Kim*, **H. Kim***, S. Kim, J. S. Jeon, "MineLoC: A Rapid Production of Lab-on-a-Chip Biosensors Using 3D Printer and the Sandbox Game, Minecraft" *Sensors* 18.6 (2018): 1896, doi: 10.3390/s18061896 (**Co-first Author**)
2. J. Choe*, U. Kwon*, M. C. Nah* and **H. Kim***, "'Design Analysis of TuskBot: Universal Stair Climbing 4-Wheel Indoor Robot" in *2017 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, Vancouver, BC, 2017, pp. 6908-6914. (**Corresponding Author**)