KWANGWOO (EMMET) YEUM

https://kyeum.github.io/website

PERSONAL

Address: 187 Acalanes DR APT6, Sunnyvale, CA, 94086
Mobile: +1)8582818910 / E-mail: evolvcor@gmail.com
Served military service in the Republic of Korea: 2012.10 - 2014.07

EDUCATION

University of California, San Diego (La Jolla, USA)

10. 2020 – 03. 2022

***Master of Science in Mechanical and Aerospace Engineering* (2022)**

- GPA: 3.95 / 4.00
- Graduation Thesis : Design optimization approach to estimate the second life lithium-ion batteries life cycle prediction

Seoul National University of Science and Technology (Seoul, South Korea)

03. 2012 – 02. 2019

***Bachelor of Science in Mechanical Design and Automation Engineering* (2019)**

- GPA: 4.19 / 4.50 (Major: 4.21/4.50 – Cum Laude)
  U.S Adjusted GPA: 3.89/4.0
- Graduation Thesis : Design and Control of Humanoid Ski Robot Platform

Karlsruhe University of Applied Science (Karlsruhe, Germany)

02. 2016 – 02. 2017

Abroad Semester as an Exchanged Student

- 1 year abroad experience in Karlsruhe, Germany
- 5 months Internship semester at Robert Bosch Buhlertal (Germany)

INDUSTRY EXPERIENCE

Apple Inc (Cupertino, US)

Present

Product Design Engineer

Apple Inc (La Jolla- Remote, US)

11. 01. 2021 – 17. 09. 2021

Product Design Intern [confidential]

- Products Design For Assembly and Manufacturing

Korea Institute of Science and Technology (Seoul, South Korea)

01.11. 2019 – 05. 09. 2020

Bionics Department Researcher

- Research in soft exoskeleton wearable robot for the stroke patients with SMA spring analysis
- Build the real-time DAQ system with UWB, FSR, EMG, Motion Capture
- Gait Analysis with the Human Signal DAQ system and RNN

Apple Inc (Cupertino, US)

24. 09. 2018 – 15. 02. 2019

Product Design Intern [confidential]

- Research in the industrial accessory products
- Design products For Assembly and For the Manufacturing

Robert Bosch GmbH (Buhl, Germany)

10. 10. 2016 – 28. 02. 2017

Predevelopment Design and Software Intern [confidential]

- Develop real-time simulation programs for predevelopment products

RESEARCH EXPERIENCE

PyeongChang Olympic 'Ski Robot Challenge' (PyeongChang, South Korea) 04. 2017 – 03. 2018
Team leader at the government research

- Design double four bar link mechanism in ski robot's leg structure
- Design main software-control system and path planning algorithms with ZMP control, Ladar, 3D Vision

Robot and DSP; RND Laboratory (SEOULTECH) 09. 2014 – 02. 2017
Lab Assistant and Research Assistant

- Research on humanoid robotics, Design control algorithms with camera vision
- Join in competitions: ABU Robocon(Pacific Asia), International Robot Contest(South Korea), Robogames(USA), SteamCup(South Korea), Robot Japan(Japan)

RELEVANT SKILLS

Mechanical Engineering	CAD (NX11.0) · FEA(Abaqus, Ansys) · AUTOCAD
Electrical Engineering	MCU (ARM, AVR) · ORCAD · uVision
Computer Science	Visual C++, C, C# · Open CV · Python · Matlab
Analysis	R(Programming) · Tensorflow

THESIS AND PUBLICATIONS

Institute of Control, Robotics and Systems; ICROS (South Korea) 05. 2018
Design and control of humanoid ski robot platform (369 – 370, 2pages), ICROS (Korea)
Korean Society for Precision Engineering; KSPE (South Korea) 09. 2020
Gait complexity Technology Using the Wearable Gait Analysis Device (562, 1pages), KSPE(Korea)

AWARDS AND HONORS

2018 5th grades in PyeongChang Olympics Ski Robot Challenge	04. 2018
2018, 2017 Team gold medals at Robogames in the USA	05. 2018, 05 2017
2015 International Robot Contest South Korea President's Award in Korea	10. 2015

SCHOLARSHIPS

Total 20,716,640₩ (Korean Won) at University Honor Scholarship	2012 – 2017
Total 10,000,000₩ at International Robot Contest and Ski Robot Challenge	11. 2015
Total 1,200,000₩ at Robot Open Academy	03. 2017

HOBBIES

Editing Videos/Films · Traveling · Swimming · Application Design

LANGUAGES

Korean (Native)	Native
English (Advanced)	Standardized Test Score: GRE – Verbal 159, Quant 169
German (Basic)	College standardized courses: A1.1, A1.2, A2
Japanese (Basic)	Highschool standardized courses

Date: 2022. 04. 02
Signature