

Won Hee (Jenny) Kim

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WORK EXPERIENCE

CENTER FOR ROBOTICS AND BIOSYSTEMS | Evanston, IL | Jun 2019 – Sep 2019
Emergent Behavior Research Aide, Murphey Lab

- Developed a vision tracking system for dynamics of synthetic cells and “smarticle” robots using Python as part of an emergent behavior project
- Optimized design of experimental setup for accurate tracking of “smarticle” robot positions, orientations, and servo angles
- Assist with building of “smarticle” mechanical and electrical parts

CHERVON NORTH AMERICA | Naperville, IL | Sep 2018 – Dec 2018
Mechanical Engineering/Product Development Co-Op Student

- Worked with circular saw, miter saw, and table saw cross-functional, front-end teams on product development for the SKILSAW brand
- Presented testing data, existing solutions, and design recommendations to stakeholders during sprint reviews
- Troubleshooting testing fixtures for durability of parts

FIGUEROA GROUP, NU PHYSICS DEPT. | Evanston, IL | Oct 2017 – Feb 2019
SuperCDMS/Micro-X Undergraduate Research Aide

- Worked with the SuperCDMS (Cryogenic Dark Matter Search) team at Northwestern, part of a collaboration of 25 institutions and laboratories
- Worked on Micro-X, a NASA-funded dark matter search rocket project
- Designed all cold electronics PCBs (as cold as 30 mK) for a new testing facility 107m underground at Fermi National Accelerator Laboratory

PROJECTS

ROBOT DESIGN STUDIO | Evanston, IL | Jan 2020 – Present

- Collaborate with graduate and undergraduate students to design and build a robot that can perform skateboarding tricks
- Develop mechanical design of robot with SolidWorks
- Calculated requirements to select motors, transmissions, and amplifiers

ORGANIC FERTILIZER APPLICATION | Evanston, IL | Jan 2020 – Present

- Work with a co-op in Thailand to develop an application method and device for a UV-sensitive organic fertilizer
- Prototype and test potential solutions
- Assure design for assembly for product to be shipped to Thailand

LEADERSHIP

NORTHWESTERN UNIVERSITY DANCE MARATHON | Sep 2017 – Present
Stage Manager, Productions Committee (Sep 2019 – Present)
Video Lead, Productions Committee (Sep 2017 – Jun 2019)

- Stage manager and video lead for one of the largest student-run philanthropies in the US (1,000+ participants, \$1 mil+ raised every year)
- Schedule, coordinate, manage, and train for all rotations and video-related tasks with 20+ members for the entire 30-hour event

EDUCATION

NORTHWESTERN UNIVERSITY

Bachelor of Science in Mechanical Engineering
Segal Design Certificate

GPA: 3.38/4.00

Major GPA: 3.51/4.00

Expected Graduation: June 2020

HONG KONG INTERNATIONAL SCHOOL

GPA: 3.86/4.00

Graduated June 2016

SKILLS/TRAITS

TECHNICAL

Full working proficiency

SolidWorks, NX, Pro-E/Creo, Python, MATLAB, C/C++, ANSYS Static Structural, Word, Excel, PowerPoint, HTML/CSS

Some proficiency

COMSOL Multiphysics, ANSYS Fluent, ANSYS Mechanical APDL, Arduino, IGOR Pro

PROJECT

Engineering Documentation

Project Management

Iterative Prototyping

GD&T

Design of Experiments

PCB Design

Computer Vision

LANGUAGE/BACKGROUND

Fluent in Korean

Basic-intermediate knowledge of Spanish

Have studied/worked/lived in 5 countries

RELEVANT COURSEWORK

- Intro to Mechatronics
- Robot Design Studio
- Machine Dynamics
- Manufacturing Processes
- Intro to Programming I, II
- Human-Centered Product Design