

YoungSeok Na

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CAREER OBJECTIVE

Dedicated and passionate engineering undergraduate seeking for an internship opportunity where I could use my hardware and software skillsets to contribute to the development of computing.

EDUCATION

Cornell University | Ithaca, NY May 2022 (Expected)
Candidate for B.S. in Electrical and Computer Engineering, Computer Science Cumulative GPA: 3.57

- Academic Honors: Dean's List (Spring 2019, Fall 2019)

PROFESSIONAL EXPERIENCE

Research Intern | Solbox Inc. July 2020
Seoul, South Korea

- Researched about statistical and deep learning algorithms used for time series anomaly detection.
- Conducted presentations on my findings in front of about 20 developers to inform them about potential ideas for future anomaly detection solution packages.

Research Assistant | Zhang Research Group, Cornell University Jan 2020 – Present
Ithaca, NY

- Contributed to the development of HeteroCL: A Python-based programming infrastructure for FPGA.
- Developed HeteroCL-version of different algorithms following an imperative coding style and optimized to reduce the resource usage when applied to FPGA simulations.
- Worked on improving HLS report interface to enable users to easily access the report information.

Undergraduate Teaching Assistant | Cornell Department of Physics Fall 2019, Present
Ithaca, NY

- Assisted students in Waves and Quantum course (PHYS 2214) discussion section to understand the course material better.
- Helped about 20 students of Mechanics course (PHYS 1112) to familiarize themselves with the redesigned lab on Fall 2019.

Electrical Subteam Member | Cornell Hyperloop Oct 2019 – May 2020
Ithaca, NY

- Worked on implementing and researching about hardware sensors for our Hyperloop pod model.
- Contacted custom battery management system and thermistor producers for our pod project.

Research Assistant | Ryu Group, Rensselaer Polytechnic Institute May 2018
Troy, NY

- Experimented with Fused Deposition Modeling (FDM) and Stereolithography (SLA) 3D printing.
- Analyzed tensile strengths of PLA and ABS plastic-based dog-bone samples by identifying breaking force and investigating the surface of the sample through SEM.

PROJECT ACTIVITY

Creator | CU Make-a-Thon 2020 Feb 2020
Ithaca, NY

- Created a fall detection device that utilizes Arduino's accelerometer and gyroscope.
- GitHub: <https://github.com/yn224/shock-detection>

Hardware Lead | CU Make-a-Thon 2019 Feb 2019
Ithaca, NY

- Awarded 4th Place: *Rookie Award* out of over 20 teams and 100 undergraduate participants.
- Utilized Arduino's sound and color sensors to build a device that converts the visual artworks into a music based on color tones.

RELEVANT COURSES

- Computer Systems Programming (C/C++, Linux, Git)
- Embedded Systems (ARM Assembly, C)
- Computer Architecture (Python, Verilog)
- Object-Oriented Programming (JAVA)
- Data Structures and Functional Programming (OCaml)
- Signals and Information (MATLAB)