

# ROSEMARY (HA YOUNG) CHO

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## EDUCATION

**The Cooper Union for the Advancement of Science and Art** – New York, NY Expected Graduation: May 2023  
Bachelor of Engineering, Chemical Engineering (Major GPA: 3.2) Minor: Computer Science (Minor GPA: 3.0)  
Half-Tuition Scholarship  
Relevant Coursework: Programming for Electrical Engineers, Data Structure and Algorithms, Deep Learning

## WORK EXPERIENCE

**Undergraduate Researcher** - Pohang, South Korea April 2022 - Present

*Pohang University of Science and Technology (POSTECH) - Computational Catalysis and Emerging Materials Laboratory*

- o Collaborated with a Ph.D. candidate to create a Python code that implements Bayesian optimization on a catalyst experimental dataset
- o Communicated with my advisor and peers through weekly Zoom meetings and PowerPoint presentations
- o Improved the RMSE of a regression model by 25% by implementing Bayesian optimization and data cleaning techniques
- o Reduced the number of features in the dataset by transforming data to a categorical format using Python
- o Expanded the dataset by developing and utilizing an automatic pdf-mining Python program on 96 journal articles

**CES Exhibitor Chat Moderator for CES 2021 Exhibitor Showcase** - Seoul, South Korea January 2021

*Bepluslab*

- o Researched companies participating in CES for potential partnerships
- o Contacted companies and was able to successfully arrange a meeting with a start-up company (12m revenue)

**Intern** - Seoul, South Korea

June 2020 – July 2020

*Orix Private Equity Korea*

- o Drafted investment progress reports for the CEO by entering financial statements into Excel
- o Drafted reports for potential portfolio companies and analyzed stock prices using Excel
- o Distributed capital market news related to portfolio companies daily
- o Transcribed company articles that are distributed to international clients

**Intern** - Seoul, South Korea

June 2019 – August 2019

*Deepnoid*

- o Transcribed English communications with clients through the telephone and email
- o Formulated Investment Relations (IR) presentations for potential investors
- o Acquired medical data for a machine learning project through translating communications and paperwork associated with an institute located in the States

## PROJECTS

**VIP - Bioengineering**

Fall 2022

*The Cooper Union*

- o Collaborated with teammates to build a 3D printed robotic hand that plays Rock Paper Scissors

**Refugees in Flight Shelter Kit (RiFSK) – Engineering Design and Problem-Solving**

Fall 2017

*The Cooper Union*

- o Researched the refugee crisis in sub-Saharan Africa to learn how to build a portable shelter
- o Collaborated with teammates to build a portable shelter kit
- o Prototyped a portable shelter using materials that are locally available in sub-Saharan Africa based on feedback by the United Nations High Commissioner for Refugees (UNHCR)
- o Presented to an audience of 120 people, including the university president, faculty, and peers

## EXTRACURRICULAR ACTIVITIES

**American Institute of Chemical Engineers (AIChE)**

Spring 2018 - Present

**Society of Women Engineers**

Fall 2018 – Present

**Academic Center for Enrichment (ACE) Assistant** (volunteer) - Interlochen, MI

Jan 2017 – May 2017

*Interlochen Arts Academy*

- o Assisted students in understanding their Algebra II, Precalculus, Chemistry, and Biology courses

## PROFESSIONAL SKILLS

**Programming Language/DevOps Tools:** Python, C++, SQL, HTML, CSS, JavaScript, Git, Docker

**Instrumental Analysis:** NMR Spectrometer, GC-MS Spectrometer, Atomic Absorption Spectrophotometer, Fluorescence Spectrophotometer

**Simulation/Modeling Software:** AutoCAD, Solidworks, COMSOL, ASPEN Plus Software, Spartan Software

**Languages:** Korean – Native, English – Fluent, Chinese - Basic