Jaeho Cho

New York City, NY • jaeho2025@gmail.com • +1 (201) 406-5974 • jaehho.github.io

EDUCATION

The Cooper Union for the Advancement of Science and Art **New York, NY**
Bachelor of Engineering in Electrical Engineering *Graduating 2026*

- Half Tuition Scholarship & Myron Coe Scholarship
- **Relevant Coursework:** Electronics, Signal Processing, Computer Architecture, Biology

EXPERIENCE

Mount Sinai • New York, NY *Feb 2024 – Present*
Mechanical Exposure Study

- Spearheading the in-depth analysis of Xsens Inertial Measurement Unit (IMU) data with MATLAB, aimed at quantifying mechanical exposure across various physical tasks.

The Cooper Union • New York, NY *Sep 2022 – Present*
Vertically Integrated Project (Bioengineering)

- Building an open-source robotic solution for real-time interaction of robotic arms and humans using motion tracking. Powered by MediaPipe and ROS2, hosted on GitHub.
- Designed and printed a PCB for an eTextile to be presented at the ACM student research competition.

The Cooper Union • New York, NY *Jun 2023 – Aug 2023*
Teacher Assistant, Design and Drawing

- Taught 24 high school students the fundamentals of engineering design and Onshape CAD.
- Led workshops on Arduinos and circuit design, culminating in students building 4-DOF robotic arms.

St. Joseph's Medical Center • Yonkers, NY *Jun 2023 – Jul 2023*
Shadowed Dr. Steve Doh

- Observed patient procedures performed by Anesthesiologist Dr. Doh and his team of varying specialties, including endoscopies, laparoscopies, orthopedics, and open surgeries.
- Gained insight into the critical decision-making process of the OR.

The Cooper Union • New York, NY *Jul 2021 – Aug 2021*
Medicine and Machine Learning, Summer STEM program

- Investigated the onset of Alzheimer's by applying statistical analysis in python (using pandas and matplotlib libraries) to Age and nWBV data to predict MMSE scores.

PROJECTS

Prosthetic Hand *Aug 2021– September 2023*

- Developed an original actuation system design to optimize dexterity utilizing extension springs.
- Designed and 3D-printed a myoelectric prosthetic hand with 6 degrees of freedom.
- Researched the field of prostheses including practical testing with a partner, born without a left hand, that provided unfiltered feedback on functionality and comfort levels.

Assistive Devices: Robotic Glove *Aug 2022– December 2022*

- Researched, designed, and built an electronic glove that assists with hand movement for people with limited mobility.

LEADERSHIP

BAG (Beyond A Goal) • New York, NY *Mar 2018 – Present*

Co-Founder, Non-profit 501c3 Organization

- Conceptualized and developed organization with Co-Founder, built a team with 50 members.
- Raised over $11K and donated over 400 Bags, including hygiene kits, clothing, food and water.
- Providing basic hygiene products and more to the members of the homeless community.
- Outreaching to homeless individuals and shelters and spotlighting the stories of the people we meet to garner more donors and partners.

Robotics Team • Cresskill High School, NJ *Sep 2021 – Jun 2022*

President and Team Leader

- Led 21 student members in the development of an award-winning robot that outperformed in the FTC (First Tech Challenge) state qualifier match.
- Managed annual STEM Night event for K-12 students' interest in STEM.
- Fundraised over $2000 from over 150 participants at the 2022 STEM Night

Physics & Chemistry Club • Cresskill High School, NJ *Sep 2021 – Jun 2022*

President of Each Organization

- Organized various interactive experiments that demonstrated scientific phenomena, such as the flying pig experiment and the golden penny experiment among many others.
- Explained and discussed complex topics in open conversations, such as quantum mechanics.

SKILLS

- **Programming:** Python, MATLAB, C, C++, Git, Verilog
- **Technology:** ROS2, Blender, Altium, Onshape, Fusion360, Gazebo, Inventor, Unity
- **Languages:** English, Korean, Spanish
- **Certification:** NYS EMT, CPR