

EDUCATION

Princeton University	2023 - 2027
<i>G.P.A. of 3.59</i>	Princeton, NJ
<i>B.S.E. in Mechanical & Aerospace Engineering; Intended Minors in Statistics & Machine Learning, Robotics</i>	
<ul style="list-style-type: none"> Relevant coursework: PHY105, PHY106, COS126, MAE305, MAE306, MAE221, MAE222, MAE223, MAE321, MAE325 	
Ridgewood High School (RHS)	2019 - 2023
<i>G.P.A. of 4.502 (weighted), Valedictorian, AP Scholar with Honor, 2021 National Merit Letter of Commendation Recipient</i>	Ridgewood, NJ

PROFESSIONAL EXPERIENCE

Princeton Robotics, PRPL Lab	2025 - Present
<i>Robotics-focused reinforcement learning researcher under Dr. Tom Silver</i>	
<i>Projects: Soft-body motion/action planning</i>	
Princeton Neuroscience Institute	2024 - Present
<i>Reinforcement learning researcher in partnership with AGI Reading Group under Dr. Sebastian Seung</i>	
<ul style="list-style-type: none"> Researched and implemented various RL techniques (Actor-Critic, PPO, imitation learning, deep-Q networks, policy gradient) Implemented algorithms for synthetic dataset collection and validation Developed a parallelized pretraining and training algorithm for an agent that automatically proofreads neuron segmentation in Neuroglancer via Chrome interaction 	
La Fondazione Giorgio Cini, ARCHiVe	2024 - 2024
<i>Machine learning and full-stack desktop app development intern</i>	
<ul style="list-style-type: none"> Independently developed the frontend and backend for a QT-based desktop app utilizing deep-learning techniques (SegmentAnything), improving workplace efficiency by ~600% Investigated and tested deep-learning-based 3D modeling techniques (Gaussian splatting) 	
Bergen Community College, Department of Chemistry	2022 - 2023
<i>Research intern under Dr. Ara N. Kahyaoglu, Physical Sciences Department Chair</i>	
<i>Projects: Antimicrobial and Synergistic Properties of Nanoparticles, Building Lewis Dot Structures of Binary Compounds/Ions, Photovoltaics Research</i>	
<ul style="list-style-type: none"> Successfully conducted research as part of a diverse team of chemistry undergraduate researchers. Involved frequent problem solving, daily interactions with faculty advisor, and communication 	

AWARDS

NJ STEAM Tank™ Challenge	2021 - 2022
<i>Project lead for ICE Pack team</i>	
<ul style="list-style-type: none"> Winner of the 2022 NJ STEAM Tank™ Challenge and \$2500 in project funding Winner of the 2022 Societal, Social, and Emotional Impact Award; Justice, Equity, Diversity & Inclusion Award; Subject Matter Expert Award; Creativity & Exemplar Integration of the Arts Award Finalist in the 2021 NJ STEAM Tank™ Challenge and winner of the 2021 Innovation Award 	

EXTRACURRICULARS

Princeton Society of Asian Scientists and Engineers	2024 - Present
<i>Co-treasurer</i>	
<ul style="list-style-type: none"> Acquired ~\$10,000 in funding from engineering departments and student government to help undergraduates attend national SASE conference in Boston 	
Princeton Racing Electric Club	2024- Present
<i>MK2BC Engineer</i>	
<ul style="list-style-type: none"> Engineer working on PRE's MKB2C car, preparing it to clear all competition guidelines, design custom PCB electronics 	
Natural Language Processing Reading Group	2024 - Present
<i>Study various papers from industry & academia related to natural language processing</i>	
Advanced General Intelligence Reading Group	2024 - Present
<i>Study various papers from industry & academia related to world models, agents, benchmarking, etc. under guidance from Dr. Sebastian Seung</i>	
Patent Applicant	Present
<i>Pending patent applicant for an induced hypothermia cooling blanket based on gaseous CO₂ circulation technology</i>	

SKILLS

Programming Languages: Python (Qt, PyTorch), Java, JavaScript, C++, HTML/CSS
 Software: Google Product Suite, Excel, Miro, Blender, AutoCAD, KiCad, Mathematica, Arduino, Figma, Inkscape, Krita, Filmora X, NX, Altium, Creo, Matlab
 Certifications: CPR, First Aid, EDX Machine Learning, Coursera Python (Data structures, databases)