

EDUCATION

Princeton University	2023 - May 2027
<i>G.P.A. of 3.72</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: Control Theory, FEA, Physics, Numerical Methods, Linear Algebra, Differential Equations, ML, Probability, Fluids	
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 - 2025
<i>Robotics-focused reinforcement learning researcher under Prof. Tom Silver</i>	
<ul style="list-style-type: none">Synthetic data generation using particle physics sims for dexterous soft-body manipulation trajectory/action planning via RL (actor-critic)	
Princeton Neuroscience Institute	2024 - Present
<i>Reinforcement learning researcher in partnership with AGI Reading Group under Prof. 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) for computer-using policiesIntegrated DINOv2/DINOv3 vision models for accurate/fine continuous computer control (mouse + keybinds)Implemented algorithms for synthetic dataset collection and validation, custom dataset labeling pipelinesDeveloped a parallelized pretraining and training algorithm for a multimodal agent that automatically proofreads neuron segmentation in Neuroglancer via Chrome	
Volvo Group, Volvo Buses	2025 - 2025
<i>Mechanical design intern</i>	
<ul style="list-style-type: none">Prepared & assessed FEA models for bracket-damper systems for BZRT (electric articulated & biartic models)Assisted with production line faults & bus prototype developmentSheet metal part development, injection-molded plastic part development	
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, <u>Building Lewis Dot Structures of Binary Compounds/Ions</u>, 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 fundingWinner of the 2022 Societal, Social, and Emotional Impact Award; Justice, Equity, Diversity & Inclusion Award; Subject Matter Expert Award; Creativity & Exemplar Integration of the Arts AwardFinalist 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>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 - 2025
<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	
NLP Reading Group, AGI Reading Group, CV/DL Reading Group, Princeton AI Alignment	2024 - Present
<i>Study various papers from industry & academia related to natural language processing, alignment, world models/foundation models, computer vision, deep learning</i>	

TECHNICAL SKILLS

Skills: Python (Qt, PyTorch), Java, JavaScript, C++, HTML/CSS, Azure, Google Product Suite, Excel, Blender, Fusion360, KiCad, Mathematica, Arduino, Figma, Inkscape, Krita, NX, Altium, Creo, Matlab, CATIA v5, Slurm