



EDUCATION

Princeton University

2023 - May 2027

G.P.A. of 3.72

Princeton, NJ

B.S.E. in Mechanical & Aerospace Engineering; Intended Minors in Statistics & Machine Learning, Robotics

- Relevant coursework: Control Theory, FEA, Physics, Numerical Methods, Linear Algebra, Differential Equations, ML, Probability, Fluids

Ridgewood High School (RHS)

2019 - 2023

G.P.A. of 4.502 (weighted), Valedictorian, AP Scholar with Honor, 2021 National Merit Letter of Commendation Recipient

Ridgewood, NJ

PROFESSIONAL EXPERIENCE

Princeton Robotics, PRPL Lab

2025 - 2025

Robotics-focused reinforcement learning researcher under Prof. Tom Silver

- Synthetic data generation using particle physics sims for dexterous soft-body manipulation trajectory/action planning via RL (actor-critic)

Princeton Neuroscience Institute

2024 - Present

Reinforcement learning researcher in partnership with AGI Reading Group under Prof. Sebastian Seung

- Researched and implemented various RL techniques (Actor-Critic, PPO, imitation learning, deep-Q networks, policy gradient) for computer-using policies
- Integrated DINOv2/DINOv3 vision models for accurate/fine continuous computer control (mouse + keybinds)
- Implemented algorithms for synthetic dataset collection and validation, custom dataset labeling pipelines
- Developed 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

Mechanical design intern

- Prepared & assessed FEA models for bracket-damper systems for BZRT (electric articulated & biartic models)
- Assisted with production line faults & bus prototype development
- Sheet metal part development, injection-molded plastic part development

La Fondazione Giorgio Cini, ARCHiVe

2024 - 2024

Machine learning and full-stack desktop app development intern

- 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

Research intern under Dr. Ara N. Kahyaoglu, Physical Sciences Department Chair

Projects: Antimicrobial and Synergistic Properties of Nanoparticles, Building Lewis Dot Structures of Binary Compounds/Ions, Photovoltaics Research

- 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

Project lead for ICE Pack team

- 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

Treasurer

- 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

MKB2C Engineer

- 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

Study various papers from industry & academia related to natural language processing, alignment, world models/foundation models, computer vision, deep learning

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