

EDUCATION

Carnegie Mellon University

Master of Science in Mechanical Engineering with AI Research (4.0 GPA)

Pittsburgh, Pennsylvania

Expected May 2027

Stevens Institute of Technology

Bachelor of Engineering in Computer Engineering (3.85 GPA)

Hoboken, New Jersey

Class of 2025

Honors: Edwin Stevens scholarship, Presidential Scholarship, ICUNJ Research Grant, Dean's list

Relevant Coursework: Applied Machine Learning, AI Agents, Designing and Deploying AI Systems, Data Structures & Algorithms, Python, Microprocessor Systems, Digital Systems Design, Operating Systems

Technologies: Python, Cuda, JavaScript, Java, C#, C++, SQL, React, Solidworks

Portfolio: <http://bit.ly/rumi-log>

EXPERIENCE

Mechanical and AI Laboratory (CMU)

Graduate Researcher

Pittsburgh, Pennsylvania

Sep 2025 – present

Project: Robotic LEAP Hand Control

- Created a **teleoperation** system with VR motion tracking used to create data for a diffusion policy in real time with intuitive robot control, reducing data collection time by half? .
- Researching **Diffusion Policy** in **robotic control** to create a system based around diffusion policy that trains multi jointed robotic hand and arm on dexterous tasks.

Project: Biomechanics Reinforcement Learning with LLM in the Loop

- Creating a program in Python that incorporates WLM calls to develop a reinforcement learning algorithm for a walking simulation in MyoAssist.

Jadu Studios

San Mateo, California

AI Engineering Intern

June 2025 - August 2025

- Researched and prototyped multi-view image generation techniques to maintain **background and setting consistency** across camera angles in scenes, improving visual coherence for Jadu's animated shorts.
- Designed and implemented a **Python**-based **Gen-AI** pipeline that generates multiple shots of the same environment, expediting spatial alignment and reducing inconsistencies across animation sequences.

TikTok

San Jose, California

Intern: Full-stack Software Developer

May 2024 – Nov 2024

- Developed and deployed an automated pitch deck generation tool using **Google APIs**, streamlining the creation of customized pitches for advertisers. Built the supporting website with **Python, JavaScript, and HTML/CSS**, leading to adoption by **100+ clients** and a **4x+ increase** in mission product engagement.
- Built and deployed a **React** and **Node.js** based platform that provided advertisers with curated trend-based ad lineup recommendations. Designed the **front-end** to optimize workflow efficiency, resulting in adoption by **1,000+ clients** and a **20x increase** in custom lineup usage.
- Redesigned and implemented the tech stack needed for the “Mission-all-in-one” product, resulting in improved API pipelines, more logical data querying, and better code repository structure.

Stevens Wearable Robotics System Laboratory

Hoboken, New Jersey

Undergraduate Researcher - Project: Smart Exoskeleton for Stroke Patients

Oct 2022 – April 2025

- Used **3D CAD** software to develop an ankle-foot exoskeleton using a series of elastic actuators to assist stroke patients in relearning how to walk.
- Led research project to optimize the energy regeneration system of the exoskeleton to remove the need for a shunt regulator. Used MatLab to analyze energy data and altered the circuitry to achieve this goal.