
Education

Carnegie Mellon University 2021 - 2025

Bachelor of Computer Science and Arts

University Honors

Final GPA: 3.64

Harvard Graduate School of Design 2025 – 2027

Master in Design Studies

Concentration in Mediums

GPA: Available December 2025

Recent Work

[Collaborative Drawing Machine](#) | Python, OpenCV, vSketch, AxiDraw | *January 2024 – May 2025* 

- Developed an interactive generative drawing machine that transforms drawn lines into fully-fledged landscapes with unique topology
- Installed piece at Pittsburgh's Tomayko Gallery as part of the [REM](#) show; presented piece at [Meeting of the Minds](#) 2025

[Lightsail](#) | Laser, TouchDesigner, Galvanometer, Phosphorescent Fabric, Table Fan | *September 2024 – November 2024* 

- Designed and built an algorithmically controlled custom laser galvanometer from circuit components
- Created an installation where the laser galvanometer projects onto glow in the dark fabric as it is blown around by a fan
- Presented piece at Pittsburgh art show Tech25 in [2024](#) and in [2025](#); gave a talk on the technical details of the piece

[Scribbler](#) | Python, vSketch, AxiDraw | *February 2024 – December 2024* 

- Researched the consistent graphical elements and data encodings that emerge from written languages across cultures
- Built a machine that writes generative asemic (without meaning) script in realistically human handwriting external to human culture
- Featured in [Lemon Publication](#) #03 and [The Squeeze Exhibition](#); created an educational [video](#) showcase with YouTuber PurpleMind

Professional Experience

Creative Technology Intern | Deeplocal | *May 2025 – August 2025*

- Engineered installations at Deeplocal, a creative technology agency known for building innovative interactive experiences
- Worked with creative freedom on client projects from day one, including projects for LEGO and Pinterest
- Traveled to project sites for installation, maintenance, and deinstallation, trusted as the only technical team-member on site

Skills: JavaScript, Node, Python, Computer Vision, Object Detection, Google Drive APIs, MAX (MSP)

Creative Software Researcher | Video and Media Design – CMU | *May 2024 – May 2025*

- Hired by Prof. Shea to create an experimental mocap lab space, integrating Vive, Rokoko, and CyanPuppets mocap systems
- Developed workflows in Unity, NDI, ReadyPlayerMe, and Mediawiki for live mocap VR and AR performances
- Presented my work and findings at [Meeting of the Minds](#) 2025

Skills: Unity, C#, Mocap Systems, NDI Tools, Animation, Rigging, and Skinning, Oculus, Vive, 3D Rendering, Scene Composition

Software Engineering Intern | Soapboxx | *February 2023 – September 2023*

- Developed an extended backend for the [Soapboxx website](#) and connected it to APIs for image databases, GPT, and image GANs
- Collaborated with Soapboxx and IB5K teams to integrate the completed project into the site using React

Skills: React, Node.js, Python, JavaScript, HTML, LLMs, GANs, Prompt Engineering, Databases, API Integration, Full-stack Development

Software Instructor | iD Tech | *June 2022 – July 2022*

- Designed custom lesson plans and taught groups of ten students ages 13-17 Unity development from beginner to advanced levels
- Ported student projects to Oculus devices and integrated various control schemes.

Skills: Unity, C#, Oculus VR, Oculus AR, Education, Leadership, Communication

Data Science Intern | Amaral Lab, Northwestern University | *March 2020 – August 2021*

- Worked with grad and postdoc students researching microbial assemblies; created a bespoke computational model of the phenomenon
- Developed responsive graphical representations of model behavior to improve accessibility of data and presented project results

Skills: Python, Matplotlib, Data Analysis, Computational Biology, Systems Modeling, Data Presentation and Communication