

EDUCATION

Yale University
8.2019 - 5.2023

B.S. Computer Science (GPA 4.0/4.0)

→ VP of Engineering of UX Society at Yale, Board Member of Yale Computer Society (y/cs)

Relevant Coursework

→ Algorithms, Data Structures, Systems Programming & Computer Organization, Advanced Topics in Computer Graphics, Discrete Mathematics, Linear Algebra & Matrix Theory

EXPERIENCE

Peabody Museum
of Natural History
6.2020 - Present

Project Lead Developer ([GitHub](#))

→ Led the development of the [COPIS3D](#) client, a native desktop application which controls a multi-camera photogrammetric 3D reconstruction system, using **Python, wxPython, and PyOpenGL**.
→ Improved rendering performance by migrating from fixed function to modern OpenGL using GLSL shaders and instanced rendering. Utilized the **pub/sub model, OOP, and MVC design pattern**.
→ Improved usability by designing and implementing features such as path generation, orientation controls, and contextual property panel. Overhauled general interface and input controls.

Software Developer Intern

→ Developed and improved the viewport for a photogrammetry application using **Python & OpenGL**.
→ Familiarized with CAD software by researching FOSS such as PrusaSlicer, Slic3r, and PrintRun.
→ Practiced Agile and Scrum in 1-2 week sprints in a team of 3 developers. **Learned C++**.

Source
Development Hub
6.2020 - Present

Data and Engineering Intern

→ Worked with a New Haven-based social enterprise to develop a data aggregation platform and a state database of affordable housing for the Connecticut Department of Housing.
→ Developed and automated a pipeline which extracted and geocoded 10,000+ housing program and subsidy records from unstructured datasets using **Python** into an **SQL database**.

Yale Undergrad
Admissions
2.2020 - 5.2020

STEM Likely Representative

→ Introduced exceptional STEM admits to life and resources at Yale.
→ Provided mentorship to incoming STEM likely students, 150 out of 30,000+ applicants.

NIST Information
Technology Lab
6.2018 - 4.2019

VR Research Intern

→ Developed an accessible VR gallery site to display 180+ glTF surfaces from the [NIST DLME](#) by using **Javascript**, A-Frame & three.js frameworks, and Oculus Rift, HTC Vive, Google Cardboard systems.
→ **Awarded the 2018 Outstanding Poster Presentation award**. Work presented at SIGGRAPH 2018 BOF session "*Immersive Visualisation for Research, Science and Art*."

PROJECTS

Bulletin VR
WebVR + speech

→ Tackled social anxiety by developing an anonymous WebVR message board site using **JavaScript**, A-Frame web framework, and Web Speech API. Designed logo and assets. ([GitHub](#))
→ **Won the Best Gaming/VR Hack at YHack 2019**, out of 147 submissions and 400+ participants.

Sign In App
Android + data

→ Developed Android app to replace school's manual sign-in system using **Android Studio & ADB**.
→ Processed, verified, presented schedule data of 1,000+ students using **Java & Apache HTTPClient**.

Robotics (FTC)
President & Captain

→ Secured \$6,400+ via MSDE grant, taught **STEM outreach programs** for underrepresented students.
→ Led team through **engineering design process**, designed and tested a nationally-competing robot.

SKILLS

Languages
Technologies

C++, C, Python, Java, JavaScript, Scheme, HTML, CSS
UNIX, Git, OpenGL, GLSL, wxWidgets, Android Studio, LaTeX, Illustrator, InDesign, Fusion 360