

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

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**
7.2020 - Present

Project Lead Developer ([GitHub repo](#))

→ Led the development of the [COPIS3D](#) client, a native desktop application which controls a multi-camera photogrammetric 3D reconstruction system, using 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.
→ Designed and implemented features such as path generation, orientation controls, contextual property panel, and overhauled general interface and input controls to improve usability.

↩ (cont.)
6.2020 - 7.2020

Software Developer Intern

→ Developed and improved the viewport for a photogrammetry application using Python and 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 ITL
6.2018 - 4.2019

VR Research Intern

→ Developed an accessible VR gallery site to display 180+ glTF equation models in the [NIST DLMF](#) using A-Frame & three.js web 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
VR + web

Developer and Designer ([GitHub repo](#))

→ Developed VR message board website to share anonymous messages and tackle social anxiety using JavaScript, A-Frame WebVR framework, and Web Speech API. Designed logo and all assets.
→ Won the Best Gaming/VR Hack, out of 147 submissions and 400+ participants, at [YHack 2019](#).

Digital Sign In
Android + data

Lead Developer

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

Robotics (FTC)
design + leadership

President and Senior Captain

→ Secured \$6,400+ via MSDE grant, funding 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, Visual Studio, LaTeX, Illustrator, InDesign, Fusion 360