

## 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 desktop application which controls a multi-camera photogrammetric 3D reconstruction system, using wxPython and OpenGL.  
→ Improved rendering performance by migrating from fixed function to modern OpenGL using GLSL shaders and instanced rendering. Utilized the pub/sub model 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 accessible VR website to visualize 180+ glTF equation models in the NIST DLMF using A-Frame & three.js web frameworks and Oculus Rift, HTC Vive, & Google Cardboard VR 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 ([Devpost project](#))

→ 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