

EDUCATION	<b>Yale University</b> <i>B.S. Computer Science, GPA 4.0/4.0</i> <b>Relevant courses</b> Data Structures, Algorithms, Systems Programming, Computer Organization, Artificial Intelligence, Computer Graphics, Discrete Mathematics, Linear Algebra & Matrix Theory <b>Extracurriculars</b> VP of Engineering of UX Society at Yale; Design Chair of Yale Computer Society (y/cs)	New Haven, CT Aug 2019 – May 2023
EXPERIENCE	<b>Facebook</b> <i>Software Engineer Intern</i> – SWE intern on the Algorithmic Optimization team.	(Remote) Menlo Park, CA Jun 2021 – Present
	<b>Yale Peabody Museum of Natural History</b> <i>Software Engineer (GitHub)</i> – Developed desktop app which controls a multi-camera photogrammetric 3D reconstruction system. – Integrated programmable OpenGL pipeline and removed all fixed-function calls to allow for graphical flexibility, implemented GPU instancing to reduce draw calls, reduced frame render times by over 80%. – Implemented pub/sub & MVC design and docstring conventions to allow for extensibility and maintenance. – Leveraged knowledge in Git, Python, OpenGL, OOP; used wxPython, numpy, GLM, GLSL shaders.	New Haven, CT July 2020 – Present
	<i>Software Developer Intern</i> – Implemented 3D viewport by researching CAD paradigms and FOSS to allow for an intuitive experience. – Practiced Agile and Scrum in 1-2 week sprints in a team of 3 developers. – Leveraged knowledge in Git, Python, OOP; used wxPython, OpenGL, C++, Perl.	June 2020 – July 2020
	<b>Yale University</b> <i>Computer Science Teaching Assistant</i> – Undergraduate Learning Assistant for CPSC 223, Data Structures and Programming Techniques. – Held 6+ hrs/week office hours, helped undergraduates on course assignments and data structures topics.	New Haven, CT Jan 2021 – May 2021
	<b>Source Development Hub</b> <i>Data and Engineering Intern</i> – Designed a data aggregation platform to process housing program and subsidy records from unstructured datasets; created an online database of affordable housing for the Connecticut Department of Housing. – Developed and tested Python Pandas scripts; parsed and geocoded 10,000+ unstructured addresses.	(Remote) New Haven, CT June 2020 – Present
	<b>NIST Information Technology Laboratory</b> <i>VR Research Intern (website)</i> – Developed an interactive virtual reality graphics website to represent 180+ 3D surfaces in the DLMF dataset; used A-Frame, THREE.js, and physics libraries to enable VR controllers to manipulate 3D models. – Awarded Outstanding Poster Presentation award; work presented at SIGGRAPH 2018 BOF session.	Gaithersburg, MD June 2018 – Apr 2019
PROJECTS	<b>Ray Tracing Renderer</b> – Wrote ray tracer in C++. Implemented diffuse and Phong shading, mirror and glossy reflections, refractions and fresnel effects, soft shadows, jittered supersampling, and a bounding volume hierarchy (BVH).	Computer Graphics
	<b>Bulletin VR (GitHub)</b> – Developed VR website using A-Frame and THREE.js that allows users to post anonymous transcribed messages on a virtual bulletin board to tackle social anxiety; inspired by campus message boards. – Won the Best Gaming/VR Hack at YHack 2019, out of 140+ submissions and 400+ participants.	Social WebVR
TOOLS	<b>Languages</b> C++, C, Python, Java, JavaScript, R, Scheme, HTML, CSS <b>Technologies</b> UNIX, Git, OpenGL/GLSL, wxWidgets, Android Studio, LaTeX, Illustrator, InDesign, Fusion 360	