



experience

Sung Robotics Lab

Student Researcher

Philadelphia, PA

Jan 2019 – Present

- model and simulate the motion of a modular pole-climbing robot in MATLAB, with hopes of generalizing to all modular configurations
- work extensively with linear algebra and kinematics
- previously: awarded funding through Google exploreCSR (Computer Science Research) program

Penn Labs

Philadelphia, PA

User Experience Designer

Sep 2019 - Present

- on the Penn Clubs and Penn Mobile Portal product teams
- brainstorm, design, and iterate desktop layouts and new features

Penn Student Design

Philadelphia, PA

Web Developer & Graphic Designer

Sep 2019 – Present

 design and implement commissioned content (websites, icons, graphics, etc.) for both on-campus and off-campus clientele

projects

Path Tracer

C++

- utilizes Monte Carlo integration method to render 3D scenes with global illumination
- implemented features: photon mapping, depth of field (thin lens camera), multiple importance sampling, etc.

Mini Minecraft

C++, OpenGL

- miniature version of the popular computer game, Minecraft
- implemented features: player physics, game engine principles, nonplayer characters

Mini Maya

C++, OpenGL

- miniature version of the 3D modeling software Autodesk Maya
- implemented features: half-edge data structure, .obj and .json import support, mesh skinning

objective

to acquire experience in computer graphics and computer science while pushing the boundaries between technical and creative disciplines

education

University of Pennsylvania

BSE, Digital Media Design Aug 2018 – exp. May 2022

• relevant coursework

Interactive Computer Graphics; Advanced Rendering; 3D Computer Modeling & Sculpture; Data Structures & Algorithms; Mathematical Foundations of Computer Science; Introduction to Computer Systems

activities & societies

Penn Labs, The Daily Pennsylvanian, PennApps Organizing Team, The Record Yearbook, Penn Student Agencies

High Technology High School

Sep 2014 - Jun 2018

skills

Technical

C++, Java, MATLAB, C, Python, Git, HTML/CSS, Processing, OCaml

Creative

Adobe Suite (Photoshop, Illustrator, InDesign), Autodesk (Maya, Inventor), Unreal Engine, Sketch, Figma, Rhino 3D