

## EDUCATION

Senior at Carnegie Mellon University 2018 - 2022  
B.S. in Electrical and Computer Engineering. Minor in Game Design.  
Relevant Course Work: **Computer Graphics, Discrete Differential Geometry, Computer Game Programming**  
Introduction to Computer Systems, Advanced Digital Signal Processing, Physics II, Digital Storytelling

## SKILLS

Unity, C++, OpenGL, Blender, C#, C, Python, Unreal, Blender, HTML/CSS, JS, Git, Spanish [B2], Japanese [B1]

## WORK HISTORY

National High School Game Academy | Programming TA Jun - Aug 2021  
I developed an intensive 3-week game programming curriculum for the student campers. I taught **interactive lectures** about game programming in **Unity with C#**, and help the students **debug** their own game projects.

FindOurView | Full Stack Developer Intern August 2020  
Created **Django** models/views/templates for annotating model output on a text-analysis platform. Wrote **detailed documentation** for front-end design and iterated based on feedback from supervisor. Taught other intern about full-stack web development in **Django, HTML/CSS, and JS**.

Carnegie Mellon University Cognitive Development Lab | Research Apprenticeship Jun - Jul 2020  
**Refactor existing Unity C# code** to be deployed to web app. Developed a **Django web app** for education psychology research with children. Rebuilt website for lab supervisor with **HTML/CSS and JS** and made multiple revisions based on user feedback.

E Ink Corporation | Intern Summer 2019  
Created **Python** libraries for interacting with a **robotic arm**, a **camera**, and **Arduino** via the app. **Drafted multiple designs** for research software using **Python** and **PyQt** and **iterated based on feedback** from supervisor. Worked closely with supervisor to define user requirements for company-internal research software.

## PROJECTS

Lingua Litis Fall 2021  
**Lead a team** of 7 students in CMU's Game Creation Society to create a game called Lingua Litis. Facilitated discussions about game design and programming, **delegated tasks** on Trello/Discord, and **wrote code in C#** with **Unity**. **Communicated frequently** on Discord to ensure everyone is on track for the end-of-semester deadline.

Starbucks Simulator Fall 2021  
Wrote **C++** code for customer spawning, and integrated 3D models and music via our asset pipeline. Wrote a colorful **fragment shader in OpenGL**. Collaborating with 3 other students from Computer Game Programming course. This game was created with minimal starter code and with only **C++** and **OpenGL** (i.e. no game engine)

Path Tracer Fall 2020  
Composed code for ray-triangle intersection, shadow ray visualization, **Monte Carlo path tracing**, mirror and glass shader with Fresnel, and environmental lighting in **C++**.

Static | Bit Bridge Halloween Game Jam Entry | Unity October 2020  
Wrote monster pursuit and gameplay flow code in **C#**. Communicated closely with fellow team members to meet a tight one-week deadline. [Code sample](#)