

# RYAN TIAN

rxt@andrew.cmu.edu – 4127106793 – Pittsburgh, PA

---

## EDUCATION

**Carnegie Mellon University**  
BSA Architecture and Mathematics

Sep 2021 – Present  
Pittsburgh, PA

---

## SKILLS

- Software Programming: proficient in Java, python, c
- 3D Modeling: Rhino, AutoCad, Inventor, Fusion 360, Blender, generative Modeling, procedural Modeling
- Communication & Presentation: clear written and spoken communication in architectural review, consistently high-performing presenter with great supporting knowledge and satisfying answers
- UI/UX Design: extensive experience in 2D and 3D design, understanding in social psychology, iOS Swift Experience
- Architectural Development Experience: human-focused design, spatial organization, material and construction understanding, experience working with client requests and building regulations
- Architectural Technology Integration: Enhancing the way humans interact with spaces through building technologies, Custom programming shaders for visualization and procedural systems for spatial design

---

## RELEVANT EXPERIENCE

**University of Michigan**  
Autonomous Driving Research Assistant

June 2019 – Sep 2019  
Ann Arbor, MI

- Optimized sorting algorithms in Visual Basic to effectively sort sensor data
- Built detailed 3D location reproductions for simulation and presentation

**Carnegie Mellon University**  
Residential Assistant

June 2022 – Present  
Pittsburgh, PA

- Ensured physical, mental, and emotional health of college students.
- Developed co-curricular curriculum to engage students in developing cultural competence

**CMU Game Creation Society - Waves Team**  
3D Generalist

Aug 2022 – Present  
Pittsburgh, PA

- Created attractive stylized mesh 3D models to fit creative vision and gameplay
- Implemented new character and environment concepts while collaborating on existing formulas

---

## PROJECTS

**Python First Person Shooter Game** Python - Tkinter [https://youtu.be/BzYy\\_1FvTu0](https://youtu.be/BzYy_1FvTu0)  
Vintage 3D graphics, A\* path finding, and a procedurally generated map to provide a retro experience.

**C Virtual Machine Implementation** C, C0  
Simulation of virtual machine in C that handles low-level data and memory manipulation.

**Architectural Projects - see Portfolio**