# Xirui Ren

Pittsburgh, PA |GitHub | LinkedIn | (405) 886-2499 | xiruiren742@gmail.com

## EDUCATION

**University of Pittsburgh**, *Pittsburgh, PA* Expected Graduation December 2025

Bachelor of Science in Computer Science
GPA: 3.657

**Relevant Coursework:**

Algorithm and Data Structure, Computer Organization and Assembly Language, Operating System, Compiler Design, Intro to AI, Software Engineering, Program Language for Web Application, Programming System Design on Mobile Robot Platform, Calculus 1&2

## SKILLS

- Proficient in Python, C, Java, Json, Java Script, CSS, C++, C#, HTML, react.js, ROS, Unity, Unreal Engine
- Mandarin Chinese
- Microsoft Word Suite, Adobe Suite, GitHub, Blender

## EXPERIENCE

**University of Pittsburgh, Computer Science Department,** Pittsburgh, PA August 2023-Current
*Undergrad Teaching Assistant*

- Support during weekly office hours to assist over 200 students enrolled in Intermediate Programming.
- Act as teaching assistant and lab instructor for Intermediate Java course and optimization labs for 200 students and help debug code for over 200 students, reducing average labs and assignments errors.
- Learn to translate intricate Java and algorithm concepts into clear and concise explanations for audiences unfamiliar with respective knowledge base.
- Collaborate with instructor to discuss completed work and plan for the upcoming week's lab.

## ACTIVITIES

**Kernel Error Narrative-Driven Horror Game,** Pittsburgh, PA March 2025

- Developed core gameplay in Unity: 2D puzzles and 3D world interaction, scene loading/unloading, state persistence, and JSON-based auto-save/load
- Integrated Video Player triggers with runtime enable/disable checks and dynamic scaling to play cutscenes reliably
- Authored custom glitch/VHS effects in Shader Graph for an unsettling aesthetic
- Built a state-machine–driven branching endings system, enabling multiple philosophical outcomes
- Optimized performance with Unity Profiler and maintained code via Git version control

**The Pitt Challenge 2023 Hackathon,** Pittsburgh, PA September 2023

- Competed in team of four to develop an application to monitor burnout levels and provide rescheduling and resting recommendations.
- Delivered focused and visually organized PowerPoint presentation, emphasizing the importance of clear and concise communication to engage the audience.

**The Pitt Challenge 2022 Hackathon,** Pittsburgh, PA October 2022

- Collaborated with a team of four to propose a health application designed to help patients understand and keep track of medical conditions.
- Created visual mockup using HTML and CSS and added additional features to enhance user experience and better demonstration.

## Honors

- Oklahoma BPA C++ Competition, 3rd place.
- NCWIT WI 2022 Aspirations Award, Honorable Mention