

EDUCATION

- **University of Pittsburgh** Pittsburgh, PA
B.S. Digital Narrative & Interactive Design; B.S. Computer Science; Minor Information Science Expected Spring 2026

EXPERIENCE

- **University of Pittsburgh** Pittsburgh, PA
Independent Study in Game Development II: Implementation *Current*
 - **Game Implementation:** Implementing full game based on design documentation and prototypes from previous independent study. Managing technical development, asset integration, gameplay systems, and iterative testing to bring the designed game to completion.
- **University of Pittsburgh** Pittsburgh, PA
Independent Study in Game Development I: Design *Completed Fall 2024*
 - **Game Design & Prototyping:** Developed original game concept from initial ideation through comprehensive design documentation. Created concept document, conducted prototyping exercises, developed in-engine prototype, and produced game design overview with macro-level systems documentation.
- **University of Pittsburgh** Pittsburgh, PA
Undergraduate Research Assistant *December 2024 - August 2025*
 - **Distributed Systems Research:** Developed C code for intrusion-tolerant distributed systems research, contributing to systems security and fault tolerance research projects.
 - **Collaboration:** Collaborated with research team on implementation and testing protocols.

PROJECTS & COMPETITIONS

- **Pittsburgh Food Access Map:** Developed full-stack web application mapping food resources across Pittsburgh to address food insecurity for Pittsburgh Policy Initiative. Built interactive React frontend with Leaflet map integration, filtering by resource type and neighborhood. Implemented Flask REST API backend with SQLite database. Created admin dashboard for content management and user reporting system.
- **Games for Social Impact Game Jam:** Received First Penguin Award (2024) and Technical Achievement Award (2025). Participated in rapid game development focused on social impact themes at University of Pittsburgh. Collaborated with interdisciplinary teams to create meaningful game experiences under tight deadlines, developing a 2.5D platformer about penguin migration.
- **Discards:** First-person narrative game exploring identity and digital consciousness through player choice. Designed using narrative architecture principles from Jenkins, Murray, and Aarseth to create ergodic gameplay where a single moral decision about delegating suffering carries permanent consequences. Implemented environmental storytelling and procedural narrative systems in Godot engine.
- **DIY Multi-Room Home Audio System:** Built synchronized multi-room audio streaming system using Snapcast, Raspberry Pis with custom DACs, and Docker containerization. Designed and 3D-printed custom enclosures. Integrated Librespot for Spotify Connect functionality across entire home network.

TECHNICAL SKILLS

- **Languages:** C, C#, Python, Java, GDScript, HTML/CSS
- **Tools:** Unity, Godot, Blender, Git, Docker, Linux, Adobe Creative Suite

RELEVANT COURSEWORK

- Introduction to Game Studies, Immersive Media Technologies, Digital Narrative and Interactive Design, Narrative and Technology, Programming Languages for Web Applications, Software Quality Assurance, Algorithms & Data Structures, Cinema and Video Games, Introduction to New Media