Rishi Rallapalli

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EDUCATION

University of Michigan | Ann Arbor, MI

College of Engineering – B.S.E. in Computer Science College of LSA – Minor in Japanese

- GPA: 3.796
- Relevant Coursework: Data Structures (EECS 280), Data Structures & Algorithms (EECS 281), Database Management Systems (EECS 484), Computer Organization (EECS 370), Programming Paradigms (EECS 390), Web Design, Development, and Accessibility (SI 339), Discrete Math (EECS 203), Linear Algebra (ROB 101), Technical Communication for EECS (TCHNCLCM 300)

GAME PROJECTS

Heart Heist

Co-Creator

- Leading the level and interactables implementations for a **3D** *Metal Gear Solid*-inspired game project built on the **Unity engine**
- Collaborating with professional AAA game developers while utilizing Trello boards, Notion, and Plastic SCM version control to manage the project
- Designed and engineered interactables using C# that add fun variability within the levels
- Constructed 3D environment art assets using Blender 3.0 to make levels visually appealing

Death Tennis

Co-Creator

- Launched a 2D *Super Smash Bros.*-like **fighting game** built on the **GameMaker Studio 2** engine on Itch.io which accumulated 37 downloads worldwide
- Designed and programmed mechanics, utility-based enemy AI, physics, animation states, shaders, and an audio controller from scratch in GameMaker Language (GML)

ACADEMIC PROJECTS

Stock Exchange Simulator

EECS 281

- Developed a program that simulates stock market transactions based on an input list of buyers, sellers, timestamps, and price
- Utilized STL priority queues with comparators and a state machine to develop an efficient algorithm within time and memory constraints in C++ that determines the most profitable time to sell stocks

Piazza Post Classifier

EECS 280

- Implemented a naïve **Bayes' machine learning algorithm** in C++ that allows a classifier to learn how to categorize posts with 87% accuracy on the online class forum Piazza by topic based on the content of the post
- Utilized a **BST** to efficiently store and access the data needed to calculate the necessary probabilities

ACTIVITIES & AWARDS

Okinawa Peace Scholarship – Awarded a \$7,000 scholarship to study abroad with a host family in Japan for 6 weeks **Tennis** – Placed second in two regional tennis tournaments

Guitar - Avid learner taking private lessons. Interested in joining or starting a rock band

SKILLS

Languages: C, C++, C#, GML, Python, SQL, MATLAB Web Development: HTML, CSS, JavaScript, Bootstrap, React Native Game Development: Unity, GameMaker Studio 2, Utility-based AI Agents, Blender 3.0, GLSL, Project Management Adobe Creative Cloud: Photoshop, Premiere Pro, After Effects, Media Encoder, Animate, Dreamweaver

Aug 2021 – May 2025

Jun 2019 – Oct 2020

Jan 2022 – Present

Dec 2022

Feb 2023