Rishi Rallapalli

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EDUCATION

University of Michigan | Ann Arbor, MI

College of Engineering – B.S.E. in Computer Science   *Aug 2021 – May 2025*

College of LSA – Minor in Japanese

- GPA: 3.838
- Relevant Coursework: *Data Structures & Algorithms, Web Systems, Software Engineering, Database Management Systems, Conversational AI, Computer Organization, Programming Paradigms*

WORK EXPERIENCE

DCS Corporation

Software Engineer Intern   *May 2024 – Present*

- Served as the main POC and engineer for the scenario building of a **successful experiment** to train DoD personnel as well as test/simulate features for **Army ground vehicles**
- Used **C++** and **Blueprints** to construct scenarios and implement components in **Unreal Engine** that collect and stream participant performance data in real time through **Apache Kafka** events
- Integrated **RPCs** and **replication** to designate roles and maintain consistency between multiple running clients
- Leveraged **Docker** containers and **Ansible** orchestration to deploy builds across Linux and Windows platforms

Heart Heist

Co-Creator   *Jan 2022 – Present*

- Leading the level and interactables implementations for a **3D *Metal Gear Solid*-inspired game** project in **Unity**
- 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   *Jun 2019 – Oct 2020*

- 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

Insta485

Web Systems   *Sep 2024*

- Developed a fully functioning **Instagram clone** web app using **Python**, **Flask**, **React**, and **SQLite**
- Implemented support for **secure** account creation and sign-in with **salted password hashing**
- Utilized **sessions** to enable posting, commenting, liking, following, and changing account information
- Built the application using **client-side dynamic pages** and **REST API** for features such as infinite scroll

ACTIVITIES & AWARDS

Okinawa Peace Scholarship – Awarded a $7,000 scholarship to study abroad with a host family in Japan for 6 weeks

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

IM Soccer – Participating in a recreational intramural soccer league at UMich

SKILLS

Languages: C, C++, C#, Python, GML, SQL, MATLAB

Web Development: HTML, CSS, JavaScript, Bootstrap, React, Flask

Game Development: Unity, Unreal Engine, GameMaker Studio 2, AI, Blender 3.0, GLSL, Project Management