

Lorenzo Uk

lorenzokiri.uk@gmail.com / [Website](#) / [LinkedIn](#) / [Github](#) / 510 · 358 · 6448

About Me

I'm a current student at the University of California at Santa Cruz majoring in Computer Science with an emphasis in Game Design. I am passionate about technology and love finding clever and creative solutions to complex problems.

Work Experience

UCSC CS LLM Summer Research

Researcher / June 2025 - Present

- Conducting research on the integration of large language models in video game design, focusing on enhancing gameplay through dynamic player interaction
- Exploring generative AI applications and integrating APIs into interactive prototypes using tools like LangChain and Google's Gemini API
- Collaborating with university faculty and peers to develop intelligent systems for adaptive storytelling and procedural content generation
- Building prototypes in a research-driven environment to evaluate the role of LLMs in future game development workflows

Alan AI

Intern / March 2022 - September 2022

- Collaborated with a team to integrate a pre-developed voice assistant into classic video games Doom and Quake, by using Node.js and Javascript. This enhances player immersion by dynamically altering in-game mechanics
- Participated in networking events and career development workshops to build industry connections and strengthen professional communication skills
- Presented the final project to peers and industry professionals, showcasing technical implementation and user experience improvements

Education

University of California at Santa Cruz

BS Computer Science: Game Design / Expected to graduate June 2027

Courses: Computer Systems and Assembly Language / Computer Systems and C Programming / Data Structures & Algorithms / Game Development Experience / Game Development Patterns / Machine Learning Basics / Programming Abstractions

Featured Projects

Dungeon Break

World Builder & Developer / Phaser · JavaScript · Tiled

- Developed an escape-room-style game in a team setting using the Phaser game framework and Tiled map editor
- Designed and implemented dynamic environments, including interactive doors and objects
- Contributed to level/world design, integrating narrative and gameplay flow across multiple puzzle rooms

Customer Database

Developer / Git · C · Ubuntu · Linux

- Built a simple command-line customer database in C, capable of reading from disk to add and delete records.
- Tracked user data including name, email, shoe size, and favorite food using structured data types.
- Organized codebase into modular directories:
 - Business db for I/O logic and main execution
 - lib for reusable functions with headers
 - tests for validating functionality with custom test cases
- Wrote a Makefile for automated building and testing across Linux environments.

Technical Skills

Programming Languages

C · C++ · C# · TypeScript · JavaScript · Python · SQL · Java · HTML5 · CSS

Game Engines

Unity · Unreal Engine 5 · GDevelop · Phaser · Godot · Tiled Map Editor

Tools & Environments

Visual Studio Code · PyCharm · Git · GitHub · Ubuntu · MySQL

Frameworks & Libraries

LangChain · React.js · Node.js