

# Jeevithan Mahenthiran

+1 (510) 258 6918 | [jeevithanmahenth@gmail.com](mailto:jeevithanmahenth@gmail.com) | [jeevithanmahenthiran.com](http://jeevithanmahenthiran.com) | [GitHub](#) | [Linkedin](#)

## EDUCATION

---

### University of California, Santa Cruz

*Bachelor of Science in Computer Science and Game Design*

*Master of Science in Computer Science and Engineering*

Santa Cruz, CA

*Sep 2021 – Jun 2025*

*Sep 2025 – Jun 2027*

## PROFESSIONAL EXPERIENCE

---

### Full Stack Software Developer

May 2025 – Present

*jLabs ENTs Research, UC Santa Cruz*

*Santa Cruz, CA*

- Developing **DirtViz** for the ENTS project, leveraging IoT sensors to monitor and optimize agriculture for sustainability and higher yields.
- Building full-stack features with **React (MUI)** and a **Flask REST API**, containerized via **Docker** for smooth deployment and testing.
- Collaborate in code reviews, design discussions, and sprints to ship maintainable, high-quality releases.

### Software Engineer Intern

Jan. 2025 – Jun. 2025

*UXLY Software*

*San Francisco, CA*

- Developed a multi-agent e-commerce chatbot using **LangChain**, **LlamaIndex**, and **Retrieval-Augmented Generation (RAG)** to deliver context-aware product search, support, and recommendations.
- Built full-stack tools for **cart and order management**, enabling natural language interactions with shopping flows and secure user sessions via **JWT-based authentication**.
- Implemented LLM **guardrails** to sanitize user inputs and model outputs, mitigating prompt injection risks and ensuring safe, compliant chatbot behavior.
- Wrote unit and benchmark tests to validate chatbot performance and reliability across product search, ordering, and multi-turn conversational flows.

### Frontend Developer Intern

Mar. 2023 – Feb. 2024

*Tech4Good, UC Santa Cruz*

*Santa Cruz, CA*

- Designed and implemented responsive web interfaces from Figma mockups using **HTML/CSS**, optimizing accessibility and mobile responsiveness.

## PROJECTS

---

### SlugRush Gym Tracker | Next.js, Tailwind CSS, FastAPI, PostgreSQL, Supabase, Docker

- Led development and project management for a full-stack web app providing **real-time gym occupancy and historical crowd trends** for UCSC students, scaling to 4,000+ users post-launch.
- Received strong endorsement from **UCSC gym manager and staff**; **SlugRush** is being integrated into **official campus resources** this fall and displayed on **gym monitors** to help students avoid wait times.

### Secure AI | LangChain, Next.js, TailwindCSS, FastAPI

- Developed an AI-powered agent using **LangChain** and **Gemini** to autonomously scan public GitHub repositories, analyzing codebases and endpoints for security vulnerabilities, outdated dependencies, and malicious binaries.
- Currently evolving the tool into a scalable **SaaS startup**, focusing on automation, security, and developer-friendly workflows.

### Public & Private Key Cryptography | C, Schmidt-Samoa Algorithm

- Implemented a full **public/private key cryptosystem** by developing key generator, encryptor, and decryptor tools based on the **Schmidt-Samoa algorithm**, leveraging **multiple-precision arithmetic** and custom **random state modules** for secure key handling.

## TECHNICAL SKILLS

---

**Languages:** Python, C/C++, C#, JavaScript, TypeScript, HTML/CSS, SQL

**Framework & Tools:** React, Node.js, Next.js, Expo, Git, Docker, Postman, Figma, Unity