

Shea E. Line

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Portfolio: <https://shealine.github.io/Portfolio-Website-V2>

EDUCATION

University of California, Santa Cruz

Santa Cruz, California

B.S. in Computer Science

Expected Graduation, June 2025

- o **Concentrations:** Game Design
- o **GPA:** 3.32/4.00, *Dean's List*
- o **Related Coursework:** Data Structures & Algorithms, Computer Organization & Programming, Computer Networking, Machine Learning, Artificial Intelligence, Object-Oriented Programming, UI/UX Design, Linear Algebra

EXPERIENCE

BlueFin Solutions LTD

Dar es Salaam, Tanzania

Remote System Design Intern

May 2024 – Aug 2024

- Created Figma wireframes for an Insurance Direct Billing web application to expedite claim settlements
- Led development of the front end with React.js, HTML, and CSS.
- Delivered responsive and user-friendly interfaces enhancing the user experience.
- Collaborated with the backend team to connect the Django system to the frontend with RESTful APIs to ensure seamless integration

PROJECTS

AI Minecraft Build Generator

Santa Cruz, California

React Developer

Aug 2024 – Present

- Web App that receives the desired size and description of a Minecraft build from the user and generates a build following that description allowing the user to download a schematic file to import the build into the game.
- Uses an LLM to generate a layered JSON of all the layers of the build ending with a smaller section of allowed blocks
- Original LLM output is then passed through a genetic algorithm to generate the interior decoration, roofline, and doorways using only the allowed blocks. The build is then scored to generate a more aesthetically pleasing build incrementally

Online Multiplayer Unity Game

Santa Cruz, California

Team Member

Mar 2024 – June 2024

- Worked on the dev team to release a Multiplayer Deathrun game using Unity Game Engine on Steam.
- Implemented a multiplayer item system, enabling players to pick up, use, and interact with a variety of items
- Integrated Photon networking for seamless synchronization of item ownership
- Developed a dynamic UI to display item details when in proximity, and integrated with inventory systems

Chess AI Engine

Santa Cruz, California

Team Member

Jan 2023 – Mar 2023

- Developed a chess engine using the Negamax algorithm with Alpha Beta Pruning
- Optimized the AI to achieve a max depth of 4 using piece square tables and Zobrist hashing

ACTIVITIES AND LEADERSHIP

Sigma Pi Fraternity International

Santa Cruz, California

Executive Council

Jan 2022 – Jan 2024

- Served as an Executive of an organization of 40+ members, planning events, managing members, and leading recruitment
- Developed a donation website to send to alumni which became responsible for 30% of the fraternity's revenue

UCSC Association for Computing Machinery

Santa Cruz, California

Club Member

Jan 2023 – Present

- A student-run organization that strives to create a supportive community for passionate computer science students.

SKILLS

Programming: Python, JavaScript, TypeScript, React.js, Node.js, MATLAB, C++, C, C#

Tools: VScode, Unity, Git, Vite