Zack Traczyk

zacktraczyk.com

Personal Projects

Education

University of California Santa

Cruz / B.S. Computer Science SPRING 2024

Technical Skills

- HTML/CSS
- Node
- JavaScript & TypeScript
- React
- TailwindCss
- C & C++
- Python
- Firebase
- AWS
- Git
- Tmux & Vim
- Linux/Unix

Skills & Interests

- Fullstack Web Development
- Agile Development
- Graphic Design
- Music Production
- Video Editing
- Soccer
- Skateboarding
- Hiking

Coursework

- Algorithms and Datastructures
- C Programming and Command Line Tools
- Computer Systems and Assembly Language
- Computer Architecture
- Machine Learning Basics
- Abstractions in Python
- Intro to Computer Networking

Professional Experience

CruzHacks / Fullstack SWE

AUGUST 2022 - FEBRUARY 2022

- Implemented participant pairing and contest submission sites for the 400+ participants of the UCSC Hackathon, using **Node**, **Typescript**, **React**, **Sass**, and **Firebase**.
- Ensured 100% code coverage using Jest.
- Worked productively in a student run organization performing DevOps.

Under / Fullstack SWE Intern

JUNE 2022 - AUGUST 2022

- Logged crucial site metrics by architecting a nosql database using **DynamoDB** and a REST API using **serverless lambdas** through **AWS CDK**.
- Created a metric dashboard that decreased time spent on customer service by 50% by designing and implementing a web dashboard made with **Typescript, React**, and **Sass**.
- Implemented an email metric service that increased internal company transparency using AWS SES and serverless lambdas through AWS CDK.

UCSC Comp Science & Engr Dept / LaTeX Editor

NOVEMBER 2021 - JUNE 2022

- Edited, reformatted, and organized Computer Science research papers written in LaTeX using various Unix tools.
- Assisted in the writing of research papers with distinguished professor of engineering Darrell Long.

Projects

HTTP Web Server / Basic Web Server Programmed in C

JUNE 2022

- Designed and implemented a multithreaded web server in C.
- Tested functionality using bash and various Unix tools.

Boid Simulation / Holographic Flocking Simulation

JUNE 2022

- Created and optimized a holographic visualization to be displayed at UCSC's Digital Scholarship Initiative with **Node**, **Typescript**, **ThreeJS**, and **WebXR**.
- Simulated 3D flocking behavior in the browser.

C Projects

MAY 2021 - NOVEMBER 2022

- HTTP-Web-Server designed and implemented a multithreaded web server.
- Huffman-Encoding implemented lossless static file compression using a huffman tree and priority queue.
- Sorting-Algorithms compared various sorting algorithms.

