SHAMITH PASULA

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EDUCATION

University of California, Berkeley   Berkeley, CA
Bachelor of Arts in Computer Science & Astrophysics   Expected **May 2025**
Honors: Dean's List, Fall 2021   GPA: **3.96**/4.00
Relevant Coursework: Algorithms, Operating Systems, Computer Security, Discrete Math & Probability, FPGA/ASIC, Physics

WORK EXPERIENCE

ZIPRECRUITER - Software Engineer Intern   May 2023 - August 2023
- Spearheaded development of system for serving banners across 500+ ZipRecruiter frontends, replacing fragmented services.
- Overhauled legacy Perl system, utilizing **Express**, **React.js**, and **Next.js** through gRPC and HTTP for security/scalability.
- Strengthened SEO and UX by reducing page load times by 40% with server-side rendering and static site generation.
- Streamlined the process of adding new banners to a 1 file change, enhancing productivity within the development team.

ATLASSIAN - Senior Developer Consultant   August 2022 - December 2022
- Architected integration between Compass and Jira through Forge, facilitating communication across engineering disciplines.
- Constructed **NLP**-based model hosted on **AWS** EC2 to group 1000s of issues by similarity to save time for end users.
- Deployed Forge frontend using **React.js**-like library and implemented **OAuth** flow between UI and NLP model.
- Headed team of 5 developers to reduce time-to-resolution for issues by 25%, leveraging agile methodologies and **CI/CD**.

ENVESTNET - Software Engineer Intern   June 2022 - August 2022
- Designed embedded finance solution for Envestnet to reach underprivileged communities through microlearning.
- Customized 30+ UI pages for Envestnet portal with **React.js**, utilizing **Redux** and **Redux Saga** for state management.
- Assembled full suite of end-to-end testing and integrated them into **CI/CD** to improve development for ~1000 employees.

INSPIRIT AI - Instructor   June 2022 - August 2022
- Tutored 20 high-school students on **AI** fundamentals, including linear regression, **CNNs**, and **NLP**.
- Mentored students in **Python**, **Tensorflow**, and **Scikit-learn** to create a distracted driver image classifier with 92% accuracy.
- Directed college prep workshops for 100+ students, collaborating with graduate students from Stanford, MIT, etc.

ASSISTIVE TECHNOLOGY DEVELOPMENT, INC. - Software Engineer Intern   January 2022 - May 2022
- Fabricated cost-effective pneumatic device to treat lockjaw, collaborating with 6 engineers at a SkyDeck-backed company.
- Developed **Python** GUI and firmware for **Arduino** microcontroller to ensure a smooth, user-friendly experience.
- Analyzed 5 key competitors and explored a range of methodologies aimed at patient-specific needs when aiding jaw opening.

PROJECTS

PINTOS   January 2023 - May 2023
- Constructed operating system utilizing **C** and **x86** with features such as multithreading, file system, virtual memory, etc.
- Implemented concurrency primitives, memory allocation & paging, floating-point operations, etc. from scratch.

SIXT33N   January 2022 - May 2022
- Composed **ML** techniques (PCA) and **C++** to build voice-controlled car with microcontroller, analog circuits, and PCBs.
- Assembled closed-loop control logic, audio signal amplification and denoising circuits to support 4 voice commands.

ORGANIZATIONS

PLEXTECH - Instructor → Project Manager → Treasurer → President   January 2022 - Present
- Pioneering **React.js** full-stack web app (link) for 50+ club members to slash reimbursement time from 6 months to 1 week.
- Driving web dev education and technology consulting NPO with $100k annual revenue and 5% acceptance rate.

SPACE TECHNOLOGIES AT CAL (STAC) - QubeSat Engineer   January 2023 - Present
- Programming microcontroller in **C++** to conduct quantum mechanics experiment on satellite launching in 2024.
- Optimized UART and SPI communications, yielding a 100x speedup and built analog circuits for signal processing.

SKILLS

Languages: Python, C/C++, TypeScript, Java, HTML/CSS, SQL, Rust, Go, Ruby, Perl, SwiftUI, Kotlin, x86, RISC-V, Verilog
Technologies: React.js, Next.js, Redux, GraphQL, MongoDB, Flask, jQuery, Selenium, TensorFlow, NumPy/Pandas, AWS