SHAMITH PASULA

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EDUCATION

University of California, Berkeley — Expected **May 2025**
Bachelor of Arts in Computer Science & Astrophysics — GPA: **3.86**/4.00
Relevant Coursework: Operating Systems, Algorithms, Databases, Internet Architecture, Computer Architecture, Security

WORK EXPERIENCE

PALANTIR — New York, NY
Software Engineer Intern — May 2024 - August 2024
- Engineered priority scheduler in **Java** to improve database compaction concurrency in Cassandra.
- Integrated continuous JFR diagnostics into Cassandra through HTTP server, enabling faster debugging of large clusters.
- Developed solution to validate database resource quotas in **Kubernetes** and Openshift environments.

ZIPRECRUITER — Santa Monica, CA
Software Engineer Intern — May 2023 - August 2023
- Implemented **Express.js** system for serving banners across 500+ **React.js** and **Next.js** frontends through gRPC and HTTP.
- 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 — Berkeley, CA
Software Developer Consultant — August 2022 - December 2022
- Constructed **machine learning** model hosted on **AWS** EC2 to group 1000s of issues by similarity to save time for end users.
- Deployed 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 — San Mateo, CA
Software Engineer Intern — June 2022 - September 2022
- Designed embedded finance solution to improve underprivileged communities' financial health 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.

ASSISTIVE TECHNOLOGY DEVELOPMENT, INC. — Berkeley, CA
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 **C++** software for **Arduino** microcontroller to ensure a smooth, user-friendly experience.

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.

8 BALL POOL — December 2022 - January 2023
- Developed an intuitive and visually appealing graphical user interface for an 8-ball pool game using Java Swing.
- Implemented physics for velocity, 2D perfectly elastic collisions, and friction from scratch.

ORGANIZATIONS

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

CS 61A - Tutor → TA — January 2022 - Present
- Developed **Flask** & **React.js** full-stack web app to allocate staff to improve office hour wait times and efficiency.
- Mentored 200+ beginner students in **Python**, recursion, OOP, etc., enabling them to write a Scheme interpreter.

SKILLS

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