

Josiah M. Kerrick

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PROFILE

Software engineer with 3+ years of experience building large-scale distributed systems, automation pipelines, and project-critical infrastructure. Deep expertise in Python, Git, CI/CD (Jenkins), Kubernetes, integration testing and troubleshooting complex production systems. Proven ability to integrate heterogeneous systems, automate workflows and collaborate cross-functionally to deliver robust software solutions.

WORK EXPERIENCE

Visa | Foster City, CA

Senior Software Test Engineer | Open VisaNet Team

January 2025 – Present

- Engineer on Visa's next-generation global authorization platform, a distributed, cloud-native system designed to replace the legacy VisaNet infrastructure supporting hundreds of billions of transactions per year.
- Designed and implemented low-latency, high-throughput microservices using Go, Kafka, Cassandra, MySQL, DB2, Docker, and Kubernetes, with strong emphasis on availability, fault tolerance, and data consistency.
- Owned critical authorization and integration workflows for Nigeria's payment ecosystem, scaling toward 6–22B transactions annually with strict reliability and regulatory requirements.
- Participated in system design reviews, production readiness reviews, and post-incident root cause analysis, improving system robustness and observability.
- Debugged and resolved production issues across network, service, and data layers, maintaining incident turnaround times under 36 hours.
- Mentored new engineers and contributed to internal documentation, improving onboarding and long-term maintainability.

Software Test Engineer | Open VisaNet Team

January 2023 – January 2025

- Built a Selenium-based automation framework integrated with Jenkins CI/CD, increasing automated test coverage 6x and reducing release sign-off time from 1 month to 1 week.
- Developed and validated high-volume data pipelines processing up to 100GB/day, including currency/rates files, client profile extracts, and real-time transaction feeds.
- Led integration testing for real-time and batch systems, ensuring correctness, latency targets, and backward compatibility with legacy infrastructure.
- Partnered closely with DevOps, SRE, and backend engineers to debug failures, validate fixes, and deploy changes safely.
- Improved test reliability and system confidence by strengthening regression testing, failure analysis, and monitoring feedback loops.

Freelance Website Development | San Luis Obispo, CA

May 2022 – January 2023

Full-Stack Developer

- Managed frontend and backend operations for 3 websites, one of which assisted in the promotion of the book, *Through My Eyes*, by Bob G. Whitworth.
- Migrated websites from an outdated server to a modern and scalable server using recent data backups and file transfer protocols.
- Updated old PHP, HTML, CSS and libraries and troubleshoot compatibility errors faced when upgrading the legacy software.
- Designed new frontend layouts for websites that had not been updated in 8+ years and created a MySQL database that runs on the backend.

PROGRAMMING PROJECTS

Remy Web App | San Francisco, CA

June 2025 – Current

- Built an AI-powered app that extracts recipes from Instagram, TikTok, YouTube, and websites, transforming them into structured grocery lists with export options and online shopping integrations like Instacart.
- Designed and implemented a scalable architecture with Next.js, React (TypeScript + hooks), Supabase (auth & DB), and OpenAI APIs, delivering features like cookbooks, meal planning, ingredient merging, and multi-format exports (txt, pdf, docx, etc.).
- Led the engineering roadmap by breaking the project into granular MVP phases and modular components, ensuring testability, rapid iteration, and smooth collaboration between AI-assisted coding workflows and traditional development.
- Leveraged AI (ChatGPT, Claude, Gemini) not just in the product (for recipe parsing) but also as a coding accelerator, using LLMs to implement, debug, and refine features, accelerating development speed and architecture validation.

Interstellar Hangover Video Game | San Luis Obispo, CA

January 2022 – April 2022

- Designed and developed a 3-dimensional arcade shooter with 4 other software engineering students which was published on Unity play: <https://play.unity.com/mg/other/webgl-u25>
- Practiced game design fundamentals in Unity by implementing physics-based movement and collisions into the game, therefore making a more realistic gaming atmosphere for users.
- Coded an A* path-finding algorithm in C# for enemy AIs that improved gameplay by creating a more challenging gaming environment.

Blockchain Voting Ballot | San Luis Obispo, CA

January 2021 – April 2021

- Created a simple yet effective smart contract for proposing and voting on laws that was completely run on the Ethereum blockchain.
- Utilized programs such as the Remix IDE for solidity-based OO programming, MetaMask to interact with the Ethereum blockchain, and Ganache to help develop and test my smart contract in a simulated real-world environment.

EDUCATIONAL BACKGROUND

California Polytechnic State University

Class of 2022

Information Systems Concentration with Computer Science Minor - 3.401 GPA

- Relevant Coursework: UX/UI, Project-Based Object-Oriented Programming and Design, Data Structures, Computer Organizations, Fundamentals of Computer Science, Blockchain Application Development, Database Systems, System Analysis and Design

SKILLS/CERTIFICATIONS

Languages: Python, Go, Java, JavaScript, TypeScript, C++, C#, SQL, Solidity

Technologies: Docker, Kubernetes, Git, Jenkins CI/CD, Kafka, Cassandra, MySQL, PostgreSQL, Unix/Linux

Frameworks: Node.js, Next.js, React, Selenium

