Rushil Shah

New York, NY | 714-404-4595 | rushil.shah113@gmail.com | linkedin.com/in/rushilshahh | rushilrs.com

Education

University of Southern California — Los Angeles, CA
B.S. in Computer Science and Business Administration; GPA: 3.6/4.0 — *Aug. 2021 – May 2025*

Experience

Bank of America — New York, NY
Software Engineer II, Digital Assets — *Aug. 2026 – Present*

- Architecting a new digital asset platform from inception, shaping product and design direction while owning the Express backend, OpenShift CI/CD, and the marketing landing page used to present the platform across the bank
- Designing and building 40+ user flows of the platform UI in typed React and shadcn, with RTK Query for server state and Mock Service Workers so the UI could be built and tested quickly
- Leading enterprise SSO integration using OAuth 2.0 Authorization Code + PKCE, adding role-based MFA and enforcing entitlement-driven authorization through an Express server managing sessions and tokens
- Maintaining a shared AI agent framework adopted by all 6 engineers, integrating specialized Jira, backend, frontend, and testing agents with team workflows and architecture context to streamline development and PR reviews
- Establishing the team's Playwright testing framework from scratch, building 60 smoke, mocked, and end-to-end tests with a coverage matrix for client onboarding, integrated into Jenkins CI with a 5-minute full-suite run

Software Engineer I — *Jul. 2025 – Aug. 2026*

- Consolidated 5+ tools into one Python/Dash dashboard for market risk EOD batch monitoring, pulling from Sybase, APIs, web scraping, and email and automating alerts and resubmissions, saving 20+ hours weekly
- Automated the weekly market risk stability deck as a scheduled Python batch job, visualizing report delays and root causes for the Risk Stability team and eliminating 10+ hours of weekly manual work

Director of Technology — Feb. 2024 – May 2025
Trojan Marketing Group — *Los Angeles, CA*

- Launched a React app for a beverage client's live event using Spotify OAuth and Grok, recommending drinks from the client's menu based on each attendee's top artists and tracks for 300+ attendees
- Directed a 12-member tech team across 4 client accounts, owning project scoping and technical direction

Software Development Intern — Sep. 2023 – May 2024
NASA Jet Propulsion Laboratory — *Pasadena, CA*

- Audited 200+ WordPress pages during NASA's large-scale migration to science.nasa.gov for content parity, layout, and WCAG 2.1 accessibility, flagging 50+ defects and fixing CMS-level issues

Projects

On-Chain Commish | *[GitHub]* — Oct. 2026 – Present

- Developing a fantasy league treasury on Ethereum that escrows buy-ins and pays winners automatically from on-chain standings using Solidity, Foundry, and React
- Implementing majority-vote dispute resolution and failure-path refunds to prevent unilateral control or locked funds; deployed to Ethereum Sepolia and verified on Etherscan, with 142 tests and ∼98.7% coverage

Basketball Advanced Analytics | *[GitHub]* — Oct. 2025 – Present

- Developing a fantasy basketball platform for a family league with roster management, XGBoost player performance predictions, and a RAG chatbot that guides non-expert users on add/drop decisions

Python Redis from Scratch | *[GitHub]* — Oct. 2025 – Nov. 2025

- Engineered a master-replica synchronization protocol featuring a multi-step handshake (PING, REPLCONF, PSYNC) and real-time command propagation to keep replicas consistent
- Built a multi-threaded TCP server in Python using threading.Lock and Condition variables to manage shared state and enable blocking operations like BLPOP and XREAD BLOCK

Skills

Languages: Python, TypeScript, JavaScript, Java, SQL, C++, Solidity
Frameworks: React, Next.js, Redux, Express, FastAPI, Flask, Dash, Tailwind CSS, shadcn, wagmi, viem
Databases & AI: PostgreSQL, Redis, Sybase, ChromaDB, XGBoost, LangChain, LLM APIs
Tools: Docker, Jenkins, OpenShift, AWS, Git, Foundry, GitHub Actions, Playwright, k6, Pytest
Certifications: CodePath AI201, Stanford/DeepLearning.AI ML Specialization, DeepLearning.AI Agentic AI