

Shawn Seiki

Plano, TX, US

(510) 920-9911

shawnseiki46@gmail.com

Summary

AI/ML Full-Stack Engineer with deep expertise in building intelligent, scalable, and high-performance applications. Skilled in architecting modern platforms using React, Next.js, Node.js, Python/FastAPI, and cloud-native ecosystems. Experienced in integrating LLMs, embeddings, RAG pipelines, vector databases, and real-time data processing into production systems. Adept at designing AI-powered product experiences, implementing event-driven microservices, optimizing full-stack performance, and leading engineering initiatives. Passionate about delivering clean architecture, strong testing practices, and robust, secure AI-driven applications.

Experience

Paramount, *Midtown Manhattan, NYC* — Senior AI/ML Full-Stack Engineer

Sep 2022 - Oct 2025

- Architected an AI-enabled analytics platform using React, Next.js, TypeScript, and Python/FastAPI, delivering real-time personalized insights that scaled across millions of user interactions.
- Integrated LLM-driven semantic search, multi-document summarization, and embeddings retrieval using OpenAI APIs and vector databases, significantly elevating platform intelligence.
- Designed scalable RAG pipelines for metadata enrichment, improving content discovery, ranking accuracy, and high-volume personalization workflows.
- Built distributed microservices with Node.js and Python to automate content tagging, transcription, and classification across large ingestion pipelines.
- Created GPU-optimized inference endpoints for recommendation scoring and high-throughput AI workloads, ensuring minimal latency at peak usage.
- Developed a large-scale design system using Storybook, Tailwind, and atomic React patterns to support consistent UI/UX across multiple engineering teams.
- Reduced TTI and overall load time by over 40% via advanced code-splitting, caching layers, and deep Vite-based build optimizations.
- Refactored GraphQL schemas and Apollo resolvers to support AI contextual queries, enabling richer filtering, ranking, and data orchestration.

- Implemented real-time observability with CloudWatch, Prometheus, and custom logging dashboards to monitor inference health and model performance.
- Built internal tools for analyzing embedding similarity, tracking model drift, and profiling inference latency in production environments.
- Led end-to-end CI/CD pipelines for AI microservices using GitHub Actions and AWS CodePipeline, improving deployment reliability and frequency.
- Introduced AI-assisted testing workflows across Jest/Vitest and Playwright, streamlining test coverage for evolving ML-powered features.
- Mentored engineers on AI integration patterns, prompt engineering fundamentals, scalable architecture, and end-to-end observability best practices.

Wells Fargo, San Francisco, CA — Senior Frontend Engineer (AI-Enhanced Systems)

Mar 2021 - Sep 2022

- Modernized enterprise dashboard systems with AI-powered anomaly detection using Python and Node.js, enabling teams to surface insights more quickly across large financial data flows.
- Built advanced React/TypeScript visualization layers driven by ML-based classification and predictive scoring models to support real-time decision making.
- Developed natural-language insights panels using LLM summarization APIs, allowing business users to interpret complex operational metrics more efficiently.
- Implemented AI-assisted form validation and automated classification workflows, reducing manual review time across multiple high-volume financial operations.
- Enhanced accessibility and Lighthouse performance through semantic refactoring, improved layout structures, and fully WCAG-compliant UI patterns.
- Created reusable Storybook and Material UI component libraries that increased design consistency and development speed across multiple banking product teams.
- Designed scalable frontend state management architectures using Redux and Context API to handle ML-enriched datasets and dynamic real-time updates.
- Implemented real-time data syncing using WebSockets and event-driven streaming APIs, ensuring highly responsive and continuously updated dashboards.
- Built CI/CD pipelines for ML-adjacent UI features using GitHub Actions and AWS CodePipeline, improving deployment reliability and reducing time to release.
- Collaborated closely with data engineering and ML teams to integrate telemetry, model signals, and unified UX patterns, ensuring consistency across AI-powered interfaces.

Target, Minneapolis, MN — Full Stack Engineer

Mar 2019 - Mar 2021

- Developed a customer-facing ecommerce platform using Next.js, React, Node.js, and Python services, improving page performance, SEO rankings, and user engagement.
- Built reusable frontend component systems using React Hooks and Tailwind CSS while coordinating backend data flows to support dynamic, ML-informed product displays.
- Implemented secure authentication and authorization flows with JWT, OAuth2, and role-based access controls across both frontend and backend systems.
- Designed and maintained Node.js and Express microservices integrated with MongoDB, handling API orchestration, business logic, and multi-service data pipelines.
- Improved overall site performance by reducing bundle size, implementing code splitting, optimizing WebP/AVIF images, and refining server-rendered pages.
- Architected a scalable micro-frontend ecosystem enabling independent development, deployment, and runtime integration of multiple full-stack modules.
- Built automated end-to-end tests using Cypress and React Testing Library, validating UI flows, API integrations, and backend data consistency.
- Integrated GraphQL APIs with Apollo Client and server-side resolvers, improving data-fetch efficiency and reducing over-fetching across the app.
- Implemented responsive UI layouts using Tailwind, and Figma-driven design specs while ensuring backend query performance supported dynamic content.
- Contributed to architectural discussions involving caching layers, API schema design, ML-assisted personalization strategies, and long-term application scalability.

Apple, Cupertino, CA — Full Stack Developer

May 2017 - Feb 2019

- Developed internal dashboards using React, Redux, TypeScript, and Node.js services, supporting high-volume workflows across multiple engineering and operational teams.
- Built interactive visualization components with D3.js and SVG, paired with backend aggregation endpoints to deliver optimized, real-time data to the UI.
- Improved backend performance by optimizing API response times, refining data models, and reducing latency across critical internal systems.
- Integrated GraphQL APIs and contributed to resolver design, streamlining data retrieval across various applications and backend services.
- Worked on frontend and backend performance optimization efforts, enhancing rendering efficiency, caching behavior, and Lighthouse scores.
- Implemented Jest and Cypress test suites to validate UI behavior and backend interactions, ensuring consistent reliability across deployments.

- Migrated legacy JavaScript modules to TypeScript and improved security through CSP enforcement, strict validation, and hardened API communication.

Skills

AI & ML:

- LLM integration (OpenAI, Anthropic, Gemini)
- RAG Systems, Vector Databases (Pinecone, Chroma, FAISS)
- Embeddings Pipelines, Semantic Search, NLP
- Python (FastAPI, NumPy, Pandas)
- Model Monitoring, Drift Detection, AI Observability

Frontend Development:

- TypeScript, React, Next.js, Vue, Angular, Redux, Context API, Hooks, Nuxt, Vuex, Pinia, RxJS, NgRx, Zustand, Storybook, D3.js, HighChart
- Tailwind CSS, Material UI, SASS, LESS
- HTML5, CSS3, jQuery, JavaScript

Backend Development:

- Node.js, TypeScript, Python/FastAPI, Java, Express
- RESTful APIs, Microservices, GraphQL, Apollo
- SQL, NoSQL, PostgreSQL, MongoDB, DynamoDB, Redis, MySQL, CosmosDB, Firebase
- Event-Driven Architecture

Cloud & DevOps:

- AWS (Lambda, EC2, S3, CloudWatch), Docker, Kubernetes, Azure
- CI/CD (GitLab, Jenkins, AWS CodePipeline, Github Actions)
- Serverless Architecture, Infrastructure as Code (IaC)
- Prometheus, Grafana for monitoring and alerting

Software Engineering Practices:

- Agile Development, Test-Driven Development (TDD)
- Scalable System Design & Architecture
- Code Reviews, Mentorship, Team Leadership

Others:

- npm, yarn, Webpack, Vite, Parcel
- Git, Github, Gitlab, Bitbucket
- Jest, React Testing Library, Cypress, Playwright, Vitest

Education

University of Phoenix, Phoenix, AZ — Bachelor's *Degree*

2013 – 2017