

Kenel Zhao

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New York, NY

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Skills

React.js | Redux | Golang | Gin | Perl | JavaScript | Typescript | SQL | AWS | Webpack | Git | Docker |

Experience

Software Engineer | Jul 2020 - June 2026 | Long Island, NY | Remote

Plug and Pay Technologies, Inc.

- Agile Project Leadership: Owned the complete lifecycle of high-priority technical projects, establishing strategic roadmaps and breaking down complex requirements into structured epics for seamless progress tracking.
- Merchant-Facing Product Engineering: Built a robust recurring and subscription billing web service for merchants using React and Redux.
- Payment Integration: Helped develop and integrate backend code to connect with external payment processors.
- Microservices & Containerization: Decomposed a complex legacy monolithic architecture into highly scalable, independent microservices and containerized them using Docker for streamlined deployment across AWS infrastructure.
- Database Management & Optimization: Managed relational SQL databases and authored optimized stored procedures to handle complex data manipulation, improve query performance, and ensure transactional data integrity.
- Frontend Modernization: Led the architectural migration of legacy frontends from jQuery to component-driven React and Redux for global state management, significantly improving UI responsiveness and code maintainability.
- Security & Identity Access: Hardened application and identity security by integrating Multi-Factor Authentication (MFA) into the core user authentication workflow.

Lab Technician / R&D Engineering Assistant | December 2015 - September 2019 | New York, NY

ClaraPath, Inc.

- Completed neural muscular junction counting, ALS research projects for CRO business, netted the company ~\$100,000
- Managed ~\$1 Mil worth of parts and equipment for the entire lab and R&D Engineering prototype, including ordering parts, maintaining vendor contacts and overseeing inventory/shipping communications with partner, Boston Engineering Corp.
- Composed wiring diagrams, instruction manuals, and related proprietary procedures for medical device prototypes
- Conducted independent R&D projects: measuring biopsy section's micron thickness accuracy with Keyence system and 3D reconstruction of 2D ultrasound images using ImageJ
- Itemized company expenses across R&D and CRO departments which streamlined the data retrieval process

Projects

Membership, Plug and Pay Technologies, Inc.

React.js | Redux | JavaScript | Perl | SQL | Docker

Merged relational DB with React-Redux using custom CRUD API requests that allowed users to manage their own personal data, subscriptions, and recurring plans.

Encryption Microservice, Plug and Pay Technologies, Inc.

Golang | Gin | SQL | AWS ECS | AWS S3 | Docker

Developed and containerized a dedicated encryption microservice to isolate and secure sensitive data workflows, ensuring strict cryptographic standards across the application ecosystem.

Multifactor Authentication Feature, Plug and Pay Technologies, Inc. Golang | Gin | SQL | AWS ECS | AWS S3 | Docker

Modernized user authentication systems by implementing Multi-Factor Authentication (MFA) to eliminate single-factor security risks across the ecosystem and harden application security.

Education

App Academy | Winter 2020 | New York, NY Immersive full-stack software development program

Stony Brook University | Spring 2012 | Stony Brook, NY | Department of Life Sciences, BS in Biology