

Kyle Osunero

Software Engineer

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Software Engineer focused on shipping reliable full-stack products, improving developer experience, and applying AI tools where they create practical leverage.

- tools:
- Git, Docker, AWS, PostgreSQL, Figma
- frameworks:
- React, Next.js, Node.js, Tailwind CSS, Express
- languages:
- TypeScript, JavaScript, Python, SQL, HTML/CSS
- AI & Automation:
- LLM Workflows, Prompt Engineering, AI Agents, MCP, RAG Patterns

Agentic engineering with MCPs

- Designs skill-driven AI workflows that align code, docs, and automation with product outcomes.
- Builds deterministic, retrieval-aware toolchains using MCP integrations, agents, and safety-aware automation.

FEATURED EXPERIENCE

Software Engineer I at SolX Technologies Inc.

July 2024 - November 2025

A leading energy technology company in the Philippines, providing digital solutions for the power sector. I played a key role in developing their core platforms, focusing on scalability, performance, and user experience.

- Highlights:
- Architected a multi-provider mapping solution for geospatial data visualization.
 - Designed type-safe backend layers using Next.js Server Actions and Drizzle ORM.
 - Developed robust form systems for complex data models using React Hook Form and Zod.
 - Engineered complex asset management interfaces for renewable energy portfolios.
 - Implemented automated cron job systems for data consistency.
 - Refactored legacy codebases to modern React patterns for better performance.

EXPERIENCE

SolX Sales-Ops Admin Tool

Software Engineer I | SolX Technologies Inc. | September 2025 - November 2025

- Architected a multi-provider mapping solution (Google Maps, Stadia Maps, Leaflet) to visualize complex geospatial data, including custom boundaries and facility clustering.
- Designed a type-safe backend layer using Next.js Server Actions and Drizzle ORM, eliminating the need for a separate API layer.
- Developed a robust form system using React Hook Form and Zod, implementing reusable input components for complex data models.
- Engineered the 'Bundling' feature, a complex many-to-many asset management interface for linking facilities to renewable energy portfolios.

Tech: Next.js 15, React 19, TypeScript, Tailwind CSS v4, shadcn/ui, Leaflet, React Leaflet, PostgreSQL, Drizzle ORM, React Hook Form, Zod, Server Actions

SolX Digital Demand Supply Matching (DDSM) Platform

Software Engineer I | SolX Technologies Inc. | July 2024 - September 2025

- Designed and implemented a cron job system to automatically update sourcing event statuses, ensuring data consistency.
- Developed end-to-end 'Suppliers' management with custom selection modals and robust validation using Yup.
- Integrated AWS SES for transactional emails and implemented responsive templates using React Email.

- Architected complex, multi-step 'New Offer' forms using Formik with dynamic field arrays for fees and contracts.
- Refactored legacy MobX stores into local React state and Formik contexts, optimizing application performance.
- Implemented server-side sorting and filtering for the Admin Dashboard to efficiently manage large datasets.
- Created a reusable component library to enforce consistent design patterns across the application.

Tech: React 17, TypeScript, Tailwind CSS, Node.js, Express, Sequelize, PostgreSQL, React Query, Redux, AWS SES, React Email, Docker, Nginx, Jenkins, Yup, Swagger, Lerna

FlashCargo

Software Engineer | StackTrek | February 2025 - July 2025

- Integrated OpenAI to automate logistics data entry, reducing manual effort by auto-generating commodity and pack type suggestions.
- Developed a full-stack booking management system with status tracking and real-time comments using Next.js, Prisma, and PostgreSQL.
- Engineered complex, multi-step quotation forms for Air, Land, and Sea freight with robust Zod validation and dynamic state management.
- Optimized admin workflows by standardizing UI components and implementing mobile-responsive designs for carrier management pages.

Tech: Next.js 14, TypeScript, PostgreSQL, Prisma, Redis, BullMQ, Tailwind CSS, Lucia Auth, Zod, OpenAI API, Docker, AWS

Advanced (AI Onboarding)

Software Engineer | StackTrek | April 2025 - June 2025

- Architected resilient ID capture and verification pipeline with webcam support and OpenAI integration.
- Implemented registrant management features including dynamic course selection and batch operations.
- Built diploma upload experience with refined UI/UX for mobile and desktop.
- Developed full-stack SSR application using React Router 7 and Cloudflare Workers.

Tech: React Router 7, Cloudflare Workers, PostgreSQL, Drizzle ORM, OpenAI SDK, Cloudflare R2, Tailwind CSS, TypeScript

AI Document Discrepancy Scanner

Software Engineer | StackTrek | January 2025 - February 2025

- AI-powered proof-of-concept for document comparison.
- Integrated MS Power Apps, SharePoint, and OpenAI API.

Tech: MS Power Apps, SharePoint, OpenAI API

MySuperCheck

Software Engineer | StackTrek | August 2024 - January 2025

- Developed a full-stack directory platform using Next.js 14, TypeScript, and PostgreSQL.
- Engineered a custom search experience with Elasticsearch, supporting location and availability filtering.
- Integrated OpenAI to automate data cleaning and formatting for thousands of business records.
- Implemented robust authentication flows including social login, email verification, and password recovery.
- Built a comprehensive request management system for professional profile updates and admin approvals.

Tech: Next.js 14, TypeScript, PostgreSQL, Drizzle ORM, Elasticsearch, Redis, Tailwind CSS, React Hook Form, Zod, OpenAI API, Google Maps API, Docker, AWS S3, Playwright

MyBlissmi

Software Engineer | StackTrek | November 2023 - August 2024

- Engineered robust booking management features including cancellation workflows, rescheduling conflict resolution, and precise timezone handling.
- Optimized service discovery by implementing advanced category filtering and enhancing SEO metadata for blog and service pages.
- Boosted user engagement by integrating a newsletter subscription flow, deploying a 'Service Quiz', and adding a dynamic reviews section.
- Strengthened application security by implementing JWT token refresh mechanisms, secure logout flows, and integrated authentication.
- Enhanced monetization features by refactoring membership duration logic and implementing automated premium membership notifications via Stripe.
- Improved application performance by refactoring core search logic, optimizing query parameter handling, and standardizing responsive design patterns.

Tech: Next.js, React, Vue.js, Node.js, Express.js, MariaDB, Framework7, Redux Toolkit, Socket.io, Stripe, Mapbox GL, Klaviyo

Cult Cellar

Software Engineer | StackTrek | August 2023 - November 2023

- Developed responsive authentication, account, and product pages using Next.js and Tailwind CSS, ensuring a seamless user experience.
- Implemented secure authentication flows using NextAuth and integrated Shopify API for user account connection and product data querying.
- Collaborated with cross-functional teams in a Kanban environment to implement UI/UX improvements and deliver robust e-commerce features.
- Developed and maintained secure APIs for user management and product operations while participating in code reviews to ensure code quality.

Tech: Next.js, Tailwind CSS, NextAuth, Shopify API

Ztock

Frontend Developer Intern | ztock® | November 2022 - March 2023

- Built the Ztock mobile app using React Native.
- Contributed to backend development with GraphQL and Ruby on Rails.

Tech: React Native, GraphQL, Ruby on Rails, Apollo

Inventory Management System

Freelance Full-Stack Developer | B&E Computer Sales | July 2020 - May 2021

- Custom POS-like inventory management system.

Tech: React, GraphQL, PostgreSQL

PERSONAL PROJECTS

Portfolio Website

2025

- This portfolio website built with Next.js and Tailwind CSS.
- Showcasing my projects and skills.

Tech: Next.js, Tailwind CSS, TypeScript

Arduino-Based PCR Thermocycler

N/A

- Low-cost PCR thermocycler for DNA amplification.
- Precise heating/cooling cycles.

Tech: C++, Arduino, PID Control, Embedded Systems