Mark Gerald Arzola

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Portfolio | Github | LinkedIn

Fullstack Frontend Software Engineer | React / TypeScript Specialist

SKILLS

Languages: JavaScript (ES6+), TypeScript, SQL, HTML5, CSS3, Python
Frontend: React, Next.js, React Native (iOS/Android), Tailwind CSS, Redux, Responsive Design, Optimization
Backend & Services: REST APIs, Node.js, fastAPI, Service-oriented architectures, WebSockets

EXPERIENCE

WSPEC (World Space Elevators Competitions) | **Fullstack Software Engineer**
05/2026 – Present

- Rebuilt the company website from Framer to Next.js, TypeScript, and Tailwind CSS.
- Set up admin access through Sanity CMS so non-technical staff can update articles, events, team profiles, and press coverage without support.
- Migrated an Express backend into Next.js API routes for the contact, newsletter, and sign-up forms.

Twice | Cofounder and Fullstack Software Engineer
11/2024 – 08/2026

- Built a loyalty rewards platform for small businesses from UX wireframes to production, using Next.js 16, React 19, TypeScript, and Tailwind CSS on the front end and an async FastAPI service on PostgreSQL and Supabase.
- Integrated Square POS webhooks with HMAC-SHA256 signature verification, idempotent event handling, and automatic shadow-user creation, so in-store purchases earned rewards in real time.
- Built a multi-store points economy with QR code redemption, OTP authentication, and a merchandise redemption flow supporting ship-to-home and in-store pickup.

Augminted Labs | **Frontend Software Engineer**
11/2021 – 08/2024

- Built and shipped high-traffic React and Next.js applications with a strong focus on performance, accessibility, and mobile-responsive UX with peak ~25,000 concurrent users.
- Implemented server-rendered and client-rendered pages, improving initial load times, SEO, and content delivery; applied code-splitting and lazy loading to optimize bundle size for mobile-constrained environments.
- Designed reusable UI systems, ensuring UX consistency across pages and features, demonstrating the design-system thinking critical for cohesive experiences.
- Integrated frontend applications with RESTful APIs and event-driven services to deliver real-time updates and personalized user experiences, using WebSocket-style messaging for live data.
- Built and launched the platform that generated over $14M in sales volume, fully verifiable on-chain via Etherscan.

Kaijukingz | **Founding Full-Stack Engineer**
08/2021 – 08/2024

- Architected and launched a Next.js and React application from 0 to 1, scaling to 30,000+ daily active users; owned the full lifecycle from architecture through deployment and monitoring.
- Built cross-platform consumer experiences, dashboards, and content-driven pages; optimized performance through code-splitting, lazy loading, and careful state management to ensure smooth UX at scale.
- Implemented token-gated flows, real-time animations driven by events, and WebSocket-style messaging. Worked with asynchronous event-driven architectures relevant to blockchain/digital-asset applications.
- Built internal admin dashboards exposing internal APIs for operations teams, enabling non-engineers to manage content, users, and operations without engineering intervention.

NOTABLE PROJECTS

Kaijukingz: Origins of STOD | Omni-chain Videogame and Dashboard Experience

- A fullstack web application combining a multi-blockchain dashboard experience with a top-down Pixi.js game. Built with React, Tailwind UI, Django/Node services, and Firebase/PostgreSQL storage to power player accounts, game state, and event-driven workflows. 38,000 confirmed unique users with ~20,000 concurrent at peak

Kaiju Mart | E-Commerce Consumer Storefront

- Built a storefront in Next accepting Ethereum, custom ERC-20 tokens, and regular card payments. With ~15,000 concurrent users at peak.

Flatiron School | Software Engineer Certificate**|** New York, NY — 12/2020 - 05/2021
University at Buffalo | Computer Science **|** Buffalo, NY — 09/2018 - 05/2020
Queens College | Computer Science **|** Queens, NY — 09/2016 - 05/2018