

Vijay Kumar

Senior Software Engineer

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Objectives

Experienced Full Stack Engineer with a robust foundation in blockchain and web development, specializing in building scalable applications and optimizing performance. Proficient in JavaScript, TypeScript, Node.js, Express.js, React, and Solidity, with a proven track record of delivering high-quality, user-centric applications in the DeFi and NFT spaces. Adept at leading teams to implement agile methodologies, ensuring iterative development and continuous improvement.

Expertise in architecting modular infrastructures, integrating smart contracts, and enhancing user experiences through innovative solutions. Committed to leveraging cutting-edge technologies to drive impactful results in decentralized finance and protocol development.

Skills

Languages: JavaScript, TypeScript, Python

Frameworks & Libraries: Express.js, React.js, Redux, Tailwind CSS, Ethers.js, Wagmi, Node.js, Thirdweb, Biconomy, GraphQL, Next.js, Nest.js

Blockchain Expertise: NFTs (Marketplaces), DeFi (Perpetual DEX, Lending-Borrowing, AMM, Vaults)

Tools & Technologies: Chai, Cypress, Hardhat, AWS (EC2 & S3), VS Code, GitHub, Vercel, Netlify, Jenkins, Docker

Services: Backend consultancy, cross-platform applications, backend-frontend optimizations

Work History

Senior Software Developer - Nibbl Finance (Feb 2023 - current)

NFT Studio

- Designed, developed, and maintained a scalable NFT marketplace platform, ensuring seamless integration of both frontend and backend components to enhance user experience and functionality.
- Engineered a robust backend infrastructure utilizing JavaScript and ExpressJS, effectively managing NFT listings, orders, trades, and settlements to support high-volume transactions.
- Successfully integrated the Rarible order book into the marketplace, facilitating efficient and secure order matching and execution, thereby improving transaction reliability.
- Deployed and managed smart contracts on the Ethereum blockchain, enabling secure NFT ownership transfers and auction functionalities.
- Developed a user-friendly and visually appealing frontend interface using Next.js, showcasing NFT collections, enabling bidding processes, and managing user accounts with a focus on responsive design.
- Created RESTful APIs to enhance the marketplace's functionality, enabling seamless integration with external services and improving overall system interoperability.
- Continuously optimized the marketplace's performance and scalability, implementing strategies to handle high transaction volumes and ensure a seamless user experience under peak loads.
- Created custom hooks for NFT contract interactions utilizing Thirdweb SDK and Ethers.js, streamlining the integration of blockchain functionalities into the frontend.
- Implemented Sign-In with Ethereum (SIWE) for secure wallet authentication, enhancing user security and simplifying the login process.
- Utilized Biconomy to facilitate gasless transactions, improving user experience by eliminating transaction fees for end-users.
- Built backend services with Node.js, AWS CDK, and DynamoDB for efficient management of NFT metadata and user analytics, ensuring high availability and scalability.

Software Developer - Element Zero (Mar 2021 - Feb 2023)

Technologies: Web3.js, Ethers.js, Gnosis SDK, Onboard.js, React.js, Typescript, Next.js, GraphQL, Postgres, Emotion, Node.js, AWS EC2, AWS S3.

- Enhanced user experience by implementing, Custom EIP712 Signature Types: Developed a secure method for off-chain

Education

**Indian Institute of Technology,
Delhi, 2014 - 2018**

BTech, Computer Engineering

signature generation and verification, facilitating gasless transactions. AND Web Wallet Support: Integrated support for popular web wallets, allowing users to interact with the DApp without incurring gas fees.

- Developed interactive dashboards to visualize wallet metrics and transaction histories and created reusable chart components for displaying complex financial data in an intuitive manner.
- Architected and orchestrated the development of a modularized suite of tools for front-end infrastructure, including:
 - Configured Webpack and Babel for optimized asset bundling and transpilation.
 - Integrated i18next for seamless localization support across multiple languages.
 - Established ESLint and Prettier configurations for code quality, and set up Jest and React Testing Library for unit and integration testing.
- Led the revamp of the fintech DApp version 2 using Next.js, employing advanced techniques such as Custom Static Site Generation (SSG) & Server-Side Rendering (SSR)
- Achieved a 70% reduction in page load times by leveraging Vercel CDN for caching and optimizing asset delivery, resulting in a significantly enhanced user experience.
- Established CI/CD pipelines using GitHub Actions for automated testing and deployment, ensuring rapid iteration and deployment of features while maintaining code quality.

Frontend Developer - Decentralized Finance (Jan 2020 - Feb 2021)

Frontend Development:

- Expertise in Angular 10, RxJS, and NGXS for robust and reactive applications.
- Proficient in HTML5, CSS3, Material UI, and Bootstrap for visually appealing and user-friendly interfaces.

Smart Contract Development:

- Solid understanding of Solidity for creating Ethereum-based smart contracts.

Project Experience

- **Business Console:** Developed a comprehensive platform for managing billing models, products, settlements, and refunds for merchants.
- **Buy Crypto Tool:** Created a user-friendly interface for purchasing PMA cryptocurrency using credit card with support for multiple currencies (USD, EUR, GBP).
- **Admin Portal:** Built a centralized dashboard for monitoring and managing user and merchant transactions.