Ahsan Grey Ali

Experience

VaaS

Full Stack Software Engineer

Open-source, tech-agnostic Kubernetes visualization and monitoring tool offering users the ability to deploy and invoke serverless functions to their clusters via OpenFaaS functionality.

- Aided in mentoring multiple teams of engineers in product development and feature implementation
- Implemented TypeScript with custom types and interfaces, resulting in a predictable, readable, and scalable codebase
- Architected UI/UX redesign by utilizing Material UI and React with the goal of consolidating code into reusable and responsive components developed with a mobile-first approach in mind for enhanced device compatibility and consistency within an intuitive and clear design
- Utilized Node.js/Express to create a RESTful server while clearly delegating responsibilities to authentication and data fetching routes and middleware
- Stored user data in a NoSQL database for flexibility and application of client sessions via cookies and JWTs
- Deployed clusters via Google Kubernetes Engine to better guide development of features, validate functionality with both cloud-deployed and locally-hosted clusters, and also minimize setup time and resources
- Migrated from Webpack to Vite to enable server-side rendering and harness esbuild for efficient bundling and serving of JavaScript code, enhancing the developer and user experience and improving development and build times with a 1500% faster initial app load
- Implemented end-to-end testing suite via use of Cypress and Jest to further validate application functionality and ease development
- Developed under the tech accelerator Open Source Labs (opensourcelabs.io)

West Virginia University School of Medicine

Research Assistant

Studying interactions at the brain-microvasculature level in settings of acute and chronic, local and systemic inflammation

- Developed and implemented automation solutions using Java and Python to optimize the quantification and analysis of neural tissue samples, resulting in improved data consistency and resource utilization.
- Efficiently managed large research datasets and ensured their reliability through automated backups.
- Authored technical literature that documented methodology, outcomes, and purpose of research activities.

Projects

Verified Voices

Platform allowing verified professionals to ask questions and engage in quality discourse with other professionals.

- Used Next.js 13 to assemble an efficient web application leveraging server-side rendering to improve performance and page load speeds, code splitting to reduce bundle size and bandwidth usage, and superior client-side hydration resulting in a responsive UX
- Led design and implementation of reusable and dynamic front-end React components to ensure code extensibility while minimizing state complexity
- Designed a relational database to securely house interactivity data in an accessible and scalable form while maintaining ACID compliance with strict schemas, allowing concurrent connections from multiple clients, and ensuring data integrity and consistency
- Leveraged GraphQL and Apollo to create a flexible yet predictable and scalable API for reliably querying data from a SQL database

Subify

Centralized subscription management dashboard

- Revised existing backend logic to better handle concurrent requests and improve modularity, simplifying code and reducing tech burden
- Crafted an intuitive and modular front end design with optimized top-down data flow through use of React and React Router
- Configured a custom Webpack to leverage HMR for improved development efficiency, transpilation of ES6+, and uglification to deliver a small, widely usable bundle

Technical Skills

TypeScript • JavaScript (ES6+) • Next.js • React (Hooks, Router, Testing Library) • Redux.js • Node.js • Express • GraphQL • Python • C++ • Java • Apollo • SQL (Postgres) • NoSQL (MongoDB) • HTML • SASS/SCSS + CSS • Material UI • TailwindCSS • Git • GitHub • CI/CD • Kubernetes • Docker • Cypress • Jest • Supertest • GCP • AWS (Elastic Beanstalk, EC2, S3, ECR)

Public Talks

Featured by Jeeny and Bractlet in their 2022 Tech Talk Series

Education

B.S. - Baylor University | M.S. - University of North Texas - Health Science Center

2020-2022