

Yousuf Elkhoga

Software Engineer | Union, NJ

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TECHNICAL SKILLS

Strong: Javascript (ES6+), Typescript, React, Node.js, Express, SQL (Postgres), GraphQL, NoSQL HTML, CSS (SCSS, Sass, TailwindCSS), Github/Git, RESTful APIs, AJAX, Scrum, UI/UX Best Practices, Webpack, Authentication, Websockets, Redux, Next.js

Experienced: Java, Spring Boot, Git, Github Actions, Docker, AWS (EC2, RDS, S3, Elastic Beanstalk, Dynamo DB)

EXPERIENCE

Second Send, Remote, US

Software Engineer

11/23 – Present

- Spearheaded the development of an innovative booking system for a peer-to-peer equipment-sharing platform, load-tested to support >1000 simultaneous bookings.
- Designed and implemented a sophisticated data model adhering to industry best practices, significantly reducing data duplication while maintaining query performance to a sub-10ms duration threshold.
- Employed Typescript to enforce strict type safety across the stack, significantly reducing runtime errors and ensuring scalability and improved accessibility across the codebase for future contributors.

Codsmith, New York City, New York

Software Engineer

04/23 – 11/23

- Developed a bidirectional collaborative IDE platform, public site, and internal tools with React, Redux, Node, Express, and PostgreSQL used by >165,000 international users.
- Reverse-engineered production codebase to map out dependency logic. Documented findings and uncovered 4 insecure third-party libraries. Replaced them with alternatives or upgrades that met security, testing, and feature criteria.
- Performed code reviews and pair-programming sessions with junior engineers; mentoring them on best practices and project execution to foster their technical and professional development.
- Increased test coverage of a 50k LoC codebase by ~12%, utilizing Enzyme and Jest to conduct unit tests for React, Redux, and Express to ensure proper rendering of components and controller outputs during authentication to enhance platform reliability, and facilitate continuous development and integration.
- Set up Docker Compose files to streamline local development and apply product-wide formatting configurations through the containerized automated testing and linting services.

Magnicache, Remote, US

Software Engineer

01/23 – Present

- Used an optimized LRU algorithm with recursive parsing functions to destructure queries and mutations before caching, reducing latency of queries by up to 90%, for an upper limit of 25 MB of query size.
- Created two GraphQL caching layers in 3 months, far exceeding an Estimated Schedule Effort of 8.45 months.
- Generated an abstract syntax tree using functional programming that mirrored query schema to extract state upon request, and utilized a recursive depth-first-search algorithm to cache data in-store.
- Facilitated the allocation of React Hooks, allowing seamless data transfer to chart listeners and monitoring cache performance. Used React Provider to measure a reduction in rendering latency by 30%.

Community FoodBank of New Jersey, Hillside, New Jersey

CRM Specialist

10/19 – 12/22

- Developed an internal web application integrating with an internal database and external APIs to automate SMS outreach, enabling non-technical staff to provide CFBNJ support to over 5,000 clients.
- Created and optimized SQL queries for ETL tools to establish and maintain efficient data pipelines across 3 departments.
- Automated the admission processes for CFBNJ-issued grants using Sharepoint, Power Automate, and Jotforms to process \$1.3M in funds and issue grants to 125 distinct partners; using the custom architecture.

PROJECTS

AI-Mong US | LLM Powered Real-Time Social game. Who is the AI among us?

- Facilitated real-time conversations via WebSocket protocol in Node.JS to connect up to 50 clients to a live game state.
- Implemented few-shot learning and temperature variance based on context to simulate up to 5 parallel game actors.

Paxy | Smart Note Organizer

- Utilized Java 17, Spring Boot, JDBC, and JavaFX to create a full-stack web app for users to organize, edit, and share rich-text notes.

EDUCATION

New Jersey Institute of Technology | Master of Science: Information Systems

Newark, NJ

New Jersey Institute of Technology | Bachelor of Science: Engineering, Minor: Applied Mathematics

Newark, NJ

PUBLICATIONS

Cardiovascular Disease Prediction Modelling | Published paper on using machine learning with biomarkers to predict heart disease.