Matt Mawson

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Skills

Languages: Java, TypeScript, Python, JavaScript, SQL
Frameworks & Libraries: React, Next.js, Angular, Spring, Jest, JUnit, Tailwind CSS, Material UI
Technologies & Tools: Git, Docker, GraphQL, REST
Cloud & Devops: AWS (S3, Lambda, AppSync, ECS, SQS, SNS), Vercel, Heroku
Databases: MySQL, DynamoDB

Experience

Application Engineer II, Vanguard – Malvern, PA   Jan 2024 – Present
- Architecting a system for Swap Order Generation with Java and TypeScript, which is projected to save millions of dollars annually.
- Leading the order generation team with the adoption of React and Next.js.
- Improved Single Portfolio Optimization performance by 30% through designing cost-effective, reliable AWS-based architecture.
- Created a React-based maintenance dashboard that reduced incident resolution time from hours to minutes.

Application Engineer I, Vanguard – Malvern, PA   June 2022 – Dec 2023
- Refactored key equity and derivative order workflows, supporting billions in weekly trades.
- Implemented scalable systems using AppSync, Lambda, S3, ECS, and SQS.
- Composed hundreds of Jest unit tests in TypeScript, guaranteeing a code coverage rate of 90%.

Associate Sr. App Developer, Union Pacific Railroad – Omaha, NE   June 2021 – June 2022
- Created a user-interface that allowed clients to automate equipment reports, leveraging various Angular Material components, Angular forms, and AG-Grid.
- Developed user-interfaces to aid in root cause analysis, cutting issue resolution time by over 50%.
- Enhanced Spring Boot microservices to integrate new data sources, improving data accuracy by 20%.

Information Technology Intern, Union Pacific Railroad – Omaha, NE   May 2020 – Sep 2020
- Reconstructed the back-end for the Utility Contract System using Java with Spring and SQL.
- Wrote unit tests with JUnit and Mockito, ensuring a code coverage rate of 90%.
- Improved UI aesthetics and data clarity, reducing processing time by up to 3 days.

Projects

Bri Bri's Kitchen   bribriskitchen.com
- Produced a recipe website which allows users to search by name or ingredients, sort, and filter recipes.
- Utilized Next.js static site generation for Search Engine Optimization, and JWT for authentication.
- Built full-stack features using React, TailwindCSS, Next.js (frontend) and Java, Spring, MySQL (backend), deployed on Vercel and Heroku.

Education

University of Michigan, College of Engineering – Ann Arbor, MI   May 2021
- BS in Industrial & Operations Engineering, Minor in Computer Science
- Graduated Cum Laude

Certifications

AWS Solutions Architect Associate   Oct 2024
Capital Markets & Securities Analyst   May 2023