Zachary Collins

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Education

University of Wisconsin - Madison

Expected May 2024

B.S. Computer Science, Certificate: Data Science

Relevant Coursework: Data Structures & Algorithms, Operating Systems, Machine Organization & Programming, Mobile App Development, Software Engineering, UX/UI, OOP, Database Management

Skills

- Programming Languages: Java, Python, C, C#, R, GAMS, SQL, NRQL, Javascript, Typescript, HTML, CSS
- Technologies/Frameworks: Angular, React, React-Native, Expo, PWA, MVC, Spring-boot
- Software/Patterns: Azure DevOps, JIRA, New Relic, Jasmine, Cypress, XUnit, Git, GitLab, Agile, CI/CD

Work Experience

Fullstack Software Engineer Intern, Brady Corp - Milwaukee, WI

June 2022 - present

- Developed a new frontend page for bulk document link generation and debugged backend queries to reduce bulk document link generation time from 2 minutes to less than 10 seconds
- Improved permissions feature in Link360 by creating several test users with different permissions and fixing
 inconsistencies where users could access permissions or change their own permissions when they shouldn't
- Migrated the PWA from Angular version 13 to 17 and updated other crucial libraries such as Ionic, Cypress, Auth0, Typescript, and Mobiscroll in order to preserve security and stability
- Integrated angular components into MVC view to create a seamless document creation experience for users by improving the UX around assigning and ordering isolation points
- Tested angular components by developing Cypress UI tests and verifying working software through automated CI/CD pipelines as well as regression testing
- QA tested other developer's stories when others weren't available in order to help push consistent releases
- Reviewed pull requests on my team as well as implemented changes based on feedback for my own PRs
- Contributed important details about how data structures were used in the beta's frontend when team was designing the database for the official release

Projects

Java Educator

github.com/ztcollins/Educator

- Organized meetings and led the development of a full stack project with five other students using Agile methodology to create a tool for students learning to program in Java
- Developed CI pipeline that automatically runs unit tests with gitlab runners every time code was pushed
- Created & maintained documentation to help create shared knowledge for all developers since the project was split by developers working on React frontend, Java/Spring-boot backend, and MySQL database

Airline Reviews Analysis

github.com/ztcollins/airlines

- Developed machine learning algorithm in GAMS in order to determine which amenities in airlines impact how a reviewer will score a particular airline by training on over 5000+ real reviews
- Organized the project to run from a Jupyter notebook, using Matplotlib to display results

Community Involvement

Student Chromebook Technician, Ronald Reagan HS - Milwaukee, WI **Website Developer,** Parkside School - Milwaukee, WI

Sep 2019 - Mar 2020