Joseph Musangu

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PROFESSIONAL EXPERIENCE

Chick-fil-A Atlanta, GA

Software Engineer Intern

Aug 2024 - Dec 2024

- Developed a web application to calculate tax implications on multi-state business travel.
- Optimized RESTful API endpoints for efficient data processing, maintaining 90% code coverage.
- Performed unit testing using npm Jest for frontend and JMock/JUnit for backend work
- Improved user experience by redesigning frontend components.
- Leveraged Java, Spring Boot, and AWS for robust and scalable application development.

Software Engineer Intern

Jan 2024 - Apr 2024

- Implemented an AWS-based invoice automation system with 85% accuracy using Amazon SES and Textract to extract fields and route invoices to correct accountant using fuzzy matching and regex
- Optimized and developed backend API endpoints using Flask and DynamoDB
- Implemented reusable components and Cypress testing

SMS Infocomm Grapevine, TX June 2022 - Aug 2022

LCD Repair

- Conducted transfer and diagnostic procedures on monitors, including inspection to determine problems such as cracked glass, main board issues, and/or LCD issues.
- Disassembled frames from LCD screens and identify damage on the LCD and main board.
- Replaced components on the main board when issues with the LCD were identified.
- Trained new staff members on procedures for diagnosing and repairing monitors.

EDUCATION

Texas Tech University

Lubbock, TX

BS Computer Science & Mathematics GPA: 3.4

Dallas Community College District

Irving, TX

AS Science GPA: 3.7

SKILLS

Java, Python, JavaScript, Typescript, C, SQL, HTML/CSS Programming Languages:

Frameworks: Pytest, React.js, Spring, Next.js, Node.js, Flask, React Native, JUnit Developer Tools: AWS, Docker, Kubernetes, Git, Postman, Jira, Redux, Tanstack Query

Languages: English, French, Afrikaans

Relevant Coursework: Data Structures & Algorithms, Object-Oriented Programming, Design of Algorithms

Projects

Personal Website React Three Fiber, Three.js, CSS

Designed and developed a visually engaging 3D interactive website, leveraging advanced web technologies to create an immersive user experience. Implemented dynamic 3D elements and animations to enhance interactivity and user engagement.

CFA Trivia Python, Flask, React, JavaScript, Typescript, HTML/CSS

Co-led a team of 10 engineers to design and develop a company-themed trivia game during a hackathon. Designed the application using Flask for the API, DynamoDB for the backend, and React for the frontend, completing the project and delivering a polished presentation at Expo within 10 hours.

Power Consumption Analytics Python, Jupyter Notebook

Analyzed power consumption data in Tetuan, Morocco, to develop predictive models based on weather parameters. Collaborated in a team of three to build a program for forecasting power consumption, including visual representations and a user-friendly input interface with uncertainty assessments.

ORGANIZATIONS

National Society of Black Engineers

• Promoted diversity in engineering and inspired underrepresented youth in STEM through active participation in NSBE activities. Aug 2022 - Present