MONTEL WOOD

Software Engineer

Gauteng/Johannesburg

SUMMARY

I am an enthusiastic and dedicated software developer. I have a strong foundation in programming fundamentals and am adept at both individual and team-based projects. I enjoy tackling complex problems, and I thrive in collaborative environments where I can apply agile methodologies. My commitment to continuous learning drives me to explore new technologies and best practices in software development.

EXPERIENCE

Expected Graduation: 2024 2023 - 2024

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Johannesburg, South Africa

- Brownfields Software Development: Gained experience in automated testing (unit, acceptance, integration), SQL, and code analysis. Refactored existing code applying TDD principles and design patterns.
- Distributed Systems Architecture: Focused on building cloud-native applications, writing secure code based on OWASP standards, and designing APIs. Collaborated in a multiteam environment, managing dependencies and applying agile practices.
- Team Project: RobotWorlds: Collaborating in a team to develop a multi-user networkbased game, implementing client socket-based communication and a multi-threaded server. Engaged in agile practices such as pair programming, daily standups, and retrospectives.

Notepad

01/2020 - 02/2021

Personal Project

Johannesburg, South Africa

- Note It Down: Developed a simple text editor application using Java Swing, simulating the functionality of traditional notepad applications.
- Key Features: Designed a user-friendly interface to facilitate easy document creation and
 editing. Implemented file management capabilities, allowing users to create, open, save,
 and print documents in .txt format. Integrated essential text manipulation features such as
 cut, copy, paste, and select all. Developed an "About" section to provide application
 information and enhance user experience.
- Technologies Used: Java, Swing, AWT for GUI design, and file I/O for document management.

Redis app 08/2024 - Present

Personal project

Johannesburg, South Africa

- Participating in a hands-on project to build a custom Redis server using Java, focusing on core functionalities such as serving basic commands and reading RDB files.
- Gaining practical experience in TCP server architecture and the Redis Protocol, enhancing understanding of real-time data management and performance optimization.
- Developing skills in in-memory data structure storage, which is widely utilized in applications as a database, cache, message broker, and streaming engine.

My personal website

07/2024 - 09/2024

Personal project

Johannesburg, South Africa

- Personal Website: Developed a dynamic personal website to showcase my portfolio, skills, and projects, enhancing my web development expertise
- .Key Features: Utilized Angular and TypeScript for building a responsive and modular
 architecture, improving code organization and maintainability. Integrated Three. js to create
 interactive 3D visualizations, providing an engaging user experience. Employed Firebase
 for backend services, including hosting and real-time database capabilities, enabling
 seamless updates and user interactions. Leveraged Bootstrap for styling, ensuring a
 modern and responsive design that enhances accessibility across various
 devices. Managed project dependencies with npm, streamlining the development process.
- Technologies Used: Angular, TypeScript, Three.js, npm, Firebase, Bootstrap.

SKILLS

Tools

Java · Typescript · Python · mySQL · Firebase · Angular · NPM · Springboot

Operating Systems

Linux · Windows

STRENGTHS

★ Problem-Solving Skills:

The ability to analyze complex problems and devise effective solutions is essential. This involves critical thinking, creativity, and a strong understanding of algorithms and data structures.

★ Attention to Detail:

Software development often requires precision.
Small errors in code can lead to significant issues, so having a keen eye for detail helps in writing clean, efficient code and debugging effectively.



EDUCATION

Higher Certificate

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2023 - 2024

Johannesburg, South