

Tinotenda Chingwena

Harare, Zimbabwe

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LINKS

- [linkedin.com/in/tinotenda-chingwena-6034a6211](https://www.linkedin.com/in/tinotenda-chingwena-6034a6211)
- tinotendachingwena.com/
- github.com/tinochings

PROFESSIONAL SUMMARY

Dynamic Professional with expertise in diverse facets of the field, including programming, algorithm design, and problem-solving. Proven track record in software development, database management, and web development. Specialized knowledge in areas such as software security, data structures and software optimization. Experienced in cybersecurity practices and system architecture. Proficient in micro-services architecture, operating systems, and version control systems. Adept at leveraging continuous integration/deployment for efficient software development workflows. Strong analytical and problem-solving skills, coupled with a commitment to staying abreast of emerging technologies. Excellent collaborator with effective communication skills and a result-oriented mindset.

SKILLS

- Programming Languages
- Algorithm Design
- Data Structures
- Bootstrap
- Software Development
- Database Management
- Web Development
- Software Security
- Cybersecurity
- System Architecture
- Micro Services
- Android
- Spring Boot
- Operating Systems
- Version Control Systems
- Communication

SOFTWARE PROFICIENCY

- Programming languages: C, C++, HTML, CSS, Java, JavaScript, Kotlin, Scala, SQL
- Frameworks & Version control: Android SDK, Spring Boot, Bootstrap, GitHub, Jira, Jetpack Compose, Hibernate, JPA, PostgreSQL, Mockito, JUnit, Thymeleaf, Retrofit

EDUCATION

Vrije Universiteit Amsterdam - WO - Netherlands | Bachelor Computer Science
2022

St. George's College - Harare Zimbabwe | Advanced Level
General Certificate of Education, 2017

WORK HISTORY

I.T SPECIALIST – Delta Transport Services | 08/2024 to CURRENT

Delta Corporation Limited - Harare, Zimbabwe

Reporting to I.T Manager

- I.T infrastructure management and maintenance for all Delta Transport Services branches nation wide
- Providing smooth integration of new systems into Delta's technological infrastructure.
- Facilitating the increase of computer literacy within the organization by the provision of ICT training and workshops.
- Providing expert software support in software systems such as SAP
- Providing technological expertise and direction to the I.T manager that aligns to the vision outlined by the company

Software Developer - FRONTEND & BACKEND | 12/2024 to 12/2024

Tinotenda Chingwena Personal Website - Harare, Zimbabwe

(<https://www.tinotendachingwena.com/>) (Unavailable)

(<https://github.com/tinochings/tinotendachingwena/>) (Available)

- Construct front-end interface using CSS, React, Next.js, React-Bootstrap to ensure fluid, interactive, visually appealing user experience and to ensure an efficient, maintainable and reusable software structure.
- Implement Spring Boot for backend, establishing robust server-side architecture to support seamless data processing and enhance overall system performance.

SOFTWARE ENGINEER - FRONT-END, BACK END & Android Administrative App | 01/2024 to 07/2024

Tiis Glam Studio - Cape Town, South Africa

(www.tiishaircollection.co.za) (Unavailable)

- Designed algorithms, system design, system protocols with UML (State diagrams, Activity diagrams) and flowcharts.
- Constructed website front-end user interface using CSS, HTML5, JavaScript, Thymleaf and Bootstrap to ensure intuitive, responsive and visually appealing user experience.
- Constructed Android application primarily with Kotlin. Java was used for cryptographic operations.
- Implemented Android user-interface using 100% Jetpack Compose with a MVVM (Model-View-View-Model) architecture, prioritising composable and data model reusability.
- Implemented network communication using Retrofit and OkHttp.
- Implemented Android session management
- Implemented secure communication between Android Administrative application and the back end using hybrid encryption (combination of end-to-end encryption & symmetric encryption). RSA was used for end-to-end encryption. AES Galois/Counter mode was used for symmetric encryption.
- Implemented a simplified and highly secure handshake protocol between a unique Android application with the server. Cryptographic keys are securely shared on the same network by running the server via localhost to ensure traffic visibility to a controlled environment. Client and server verify and authenticate each other's identities during this protocol. Cryptographic keys are then securely copied and stored in secure hardware on both client and server.

- Implement Spring Boot for backend, establishing robust server-side architecture to support seamless data processing and enhance overall system performance.
- Integrate rate limiting mechanisms to limit brute-forcing server requests, enhance system stability and prevent potential performance bottlenecks.
- Incorporate PostgreSQL database into server infrastructure, ensuring efficient and reliable data storage and retrieval.
- Implement a secure, thread-safe ordering process in a multi-threaded environment. A pessimistic SQL locking implementation that skips products which are locked by another transaction, coupled with a back off policy that ensures a deadlock free updating of a products stock and ordering process.
- Implement secure account creation processes, prioritizing user data protection and privacy through encryption and authentication measures.
- Execute thorough testing procedures, including unit tests and integration tests, to identify and rectify potential issues and ensure system's reliability.
- Implement caching mechanisms to optimize data retrieval, reducing latency and enhancing overall server response times.

WEB DEVELOPER - FRONT-END & BACK END | 08/2023 to 03/2024

Zvevatsunga Steel & Plumbing - Harare, Zimbabwe

- Construct front-end user interface using CSS, HTML5, JavaScript, and Bootstrap to ensure intuitive and visually appealing user experience.
- Implement Spring Boot for backend, establishing robust server-side architecture to support seamless data processing and enhance overall system performance.
- Incorporate PostgreSQL database into server infrastructure, ensuring efficient and reliable data storage and retrieval.
- Integrate rate limiting mechanisms to manage server requests, enhancing system stability and preventing potential performance bottlenecks.
- Establish robust information validation processes, ensuring data integrity and safeguarding system against erroneous or malicious inputs.
- Implement secure account creation processes, prioritizing user data protection and privacy through encryption and authentication measures.
- Execute thorough testing procedures, including unit tests and system tests, to identify and rectify potential issues and ensure system's reliability.
- Implement caching mechanisms to optimize data retrieval, reducing latency and enhancing overall server response times.

SOFTWARE PROGRAMMER | 05/2023 to 07/2023

Trin Media Consultancy Agency - Cape Town Western Cape Province, South Africa

- Implemented front-end elements utilizing CSS, HTML5, JavaScript, and Bootstrap, ensuring a visually appealing and responsive user interface.
- Employed Spring Boot for the backend, establishing a robust and efficient server-side architecture to support seamless data processing.
- Implemented coding practices to guarantee cross-browser compatibility, optimizing the user experience across various web platforms.
- Utilized Bootstrap to integrate a responsive design, enhancing the project's accessibility on diverse devices and screen sizes.
- Implemented JavaScript to create interactive features, fostering user engagement and providing a dynamic browsing experience.

- Conducted rigorous code reviews and adhered to best practices, maintaining high standards of code quality and readability.

OPEN-SOURCE PERSONAL PROJECT | 05/2023 to 07/2023

POETS KINGDOM (KOTLIN) (<https://github.com/tinochings/PoetsKingdom>) (Available)

- Implemented user interface using Jetpack Compose (Approx 90%) and XML (Approx 10%) ensuring a visually appealing and responsive user interface.
- Incorporates multi-threading using Kotlin coroutines to prevent main thread blocking, run long intensive tasks and ensure a seamless user experience.
- Incorporates Model-View-View-Model (MVVM) design pattern to ensure testability in isolation and ensures a separation of business and user interface logic.
- Ensures image resource pooling with the help of Glide library. Alleviates memory usage with caching mechanisms that prevent constant decoding of image files.

PERSONAL PROJECT | 07/2021 to 11/2022

Madzinza (JAVA) (Unavailable)

- Implemented user interface using XML. The design is responsive and scales fluidly for all sorts of device shapes and sizes
- Ensures image resource pooling with the help of Glide library. Alleviates memory usage with caching mechanisms that prevent constant decoding of image files
- Incorporates Model-View-Injection (MVI).
- Incorporates multiple custom-made paging software algorithms to split up and jump to pages in a memory efficient manner whilst adhering to a strict time complexity to ensure enhanced user experience.
- Adheres to Android accessibility guidelines.

ASSISTANT TEACHER | 01/2016 to 02/2016

St. George's College - Harare, Zimbabwe

- Facilitated students through various educational activities, promoting engaging learning environment and ensuring active participation.
- Provided personalized assistance to students, addressing unique learning needs and fostering inclusive educational experience.
- Collaborated with lead teachers to contribute to effective lesson planning, enhancing overall curriculum delivery.