# TINSAEBERHANE YOHANNES

#### **Professional SUMMARY**

- Java Developer with over 8 years of experience with all phases of the SDLC in delivering high-quality, robust, and maintainable applications in alignment with business requirements.
- Experience in Software Development including Requirement Analysis, Design, Implementation, Testing, Deployment and Maintenance.
- Experience in working distributed systems using Spring Boot, Rest API, Core Java, Collections, Multithreading, Spring Data JPA, Spring Security, Spring Cloud, Validation, Logging, Testing, Actuator, Swagger, Caching, Scheduling Jobs and followed best practices like Versioning APIs, Error handling and technical documentation.
- Expertise with developing web-based GUI (frontend UI) using HTML, JavaScript and CSS, Angular.
- Experience in Database Programming using MySQL, PostgreSQL) and Mongo DB.
- Designed and implemented RESTful APIs and web services using Java and Spring frameworks, enabling efficient data exchange between the mobile operating system and various external systems.
- Motivated for continuous improvements and learning. Committed to adding value through creative problem-solving, attention to detail, collaboration, and decision-making skills with a results-driven approach. Good communication skills both written, spoken, and teamwork skills.
- Used Kafka, ActiveMQ and JMS in micro-services application for scalability and availability.
- Implemented continuous integration and continuous delivery (CI/CD) pipelines using Jenkins, automating the build, test automation, and deployment processes.
  - Conducted software quality assurance, and writing unit tests using JUnit, and integration testing identifying and fixing software defects early in the development lifecycle and reducing post-release issues.
  - Experienced in AWS services like Elastic Compute Cloud (EC2), Simple Storage Service (S3), AWS
     Lambda, Identity and Access Management (IAM), Relational Database Service (RDS), AWS Simple Queue
     Service (SQS), AWS Simple Notification Service (SNS), DynamoDB. Experience in configuration of
     Network architecture on AWS with VPC, Subnets, Internet gateway, NAT, Route table.
  - Have Good knowledge of Design Patterns like Singleton, DAO Factory, MVC, Service Locator Pattern, Builder Pattern, Proxy Pattern etc.
  - Good knowledge in Object-Oriented Programming Concepts, Microservices, SOA, Monolithic, TDD, Data Structure, Multi-Threaded scalable systems.
  - Strengths include strong customer interface and problem-solving skills, requirement analysis, designing and programming, finding, and fixing critical technical problems.
  - Followed agile software development practice paired programming, test driven development and scrum status meetings.

### **EDUCATION**

Master's in computer science, Maharishi International University

2022 - 2025

Key Courses: Modern Programming Practices, Database management, Software Engineer, Enterprise Architecture, Software Architecture, Algorithm, Cloud Computing, Web Application Architecture.

Bachelor's in electrical engineering, University Of Asmara

2001 - 2006

Related Courses: Computer Programming, Advanced Programming, Data Communication and Computer Networks

### **SKILLS**

Languages: Java, C++, JavaScript

Web: JavaScript, HTML5, CSS3, XML, jQuery, JSP, Servlets, TypeScript, Bootstrap, Ajax

Web Services: SOAP, REST API, JSON, GraphQL

Web/App Servers: Apache Tomcat, Glassfish, JBoss, Pivotal, IIS, Camunda, Nginx

Frameworks: J2EE, Spring Framework, ORM (Hibernate), Angular JS, React JS, Express JS, JavaFX,

JUnit, Selenium, NodeJS, Mockito

Databases: MySQL, PostgreSQL, MS SQL Server, HQL, Mongo DB (NoSQL), Redis cache, Oracle,

Cassandra

**Design Patterns:** Singleton, Prototype, Session, Session Factory, Observer, Adapter, Facade

Methodologies: Agile/Scrum, Kanban, Waterfall

**Tools:** Git, Jenkins, Docker (containerization), Kubernetes, Kafka, Active MQ, RabbitMQ, Clickup, Concur, Jira,

Confluence, Postman, Swagger, ELK (ElasticSearch), Splunk, Terraform, SonarQube

**Cloud Technology:** Pivotal Cloud Foundry, AWS (DynamoDB, Aurora DB, S3, RDS, EFS, EC2, ECS, ElastiCache, Code Pipeline, CloudFormation, Lambda)

Core Competencies: Microservices, SOA, Monolithic, TDD, OOP (Object Oriented Programming), Data Structure,

**Multi-Threading** 

Operating Systems: Windows, Linux, Unix

#### **EXPERIENCE**

Role: Software Engineer Organization: Kabbee.org February 2023 – December 2023

San Jose, USA

**Project:** Kabbee Streaming Application - streams educational and entertaining films for east African audience.

- Implemented secure user authentication using Jwt authentication and spring security, ensuring robust security measures for user to access the application.
- Implemented Api Gateway for routing and security and service discovery for monitoring availability and health of services.
- Actively participated in code reviews and provided constructive feedback to enhance code quality.
  - Conducted rigorous testing, tuning, and debugging using JUnit and Integration testing to identify and resolve issues, ensuring a stable and user-friendly app experience.
  - Collaborated with the backend team to design RESTful APIs for seamless communication with the streaming server, optimizing data exchange and MongoDB integration.
- Used Kafka for asynchronous messaging, and JMS for email notification.
- Used Hibernate to implement JPA to handle database connections efficiently.
- **Technologies**: Java, Springboot, Spring Security, JWT, JPA, Hibernate, Stripe Api, Apigee gateway, Eureka discovery service, Config server, Rest, Apache KAFKA, JMS, Click up, Star UML, AWS, GitHub, MySQL, Mongo, Junit, Integration Testing, HTML, CSS, JavaScript, Flutter, Tomcat, Maven, Windows.

**Role:** Automation Engineer

June 2020 - May 2022

**Organization:** Lysteknikk Elektroentrprenør

Oslo, Norway

**Projects**: Automating sensors for lighting, and temperature control for new buildings.

- $\bullet \ \ Implementing \ communication \ protocols \ like \ Zigbee \ and \ KNX \ for \ efficient \ data \ exchange \ between \ devices.$
- Developing algorithms and logic to optimize energy usage by controlling when and how lights are turned on/off.
- Integrating various smart lighting devices such as bulbs, switches, sensors, and controllers into a unified system.
- Implementing automation rules based on occupancy detection, time of day, or user preferences.
  - Integrate third-party services and APIs, such as payment gateways or email services, as needed for the website's functionality.
  - **Technologies**: IOT, Zigbee, Java, spring boot, Stripe Api, Rest, Kafka, JMS, Jira, GCP, GitHub, MySQL, MongoDB, Junit, Integration Testing, Linux.

Role: Sr. Software Engineer April 2019 - June 2020

**Organization:** Brothers Computer Center Asmara, Eritrea

Client: Eritrea Investment and Development Bank

**Project:** Whus Wefri - manages clients investment plans, bank's investment specialist provides financial advice, and follows client's investment.

• Oversaw the design and development of a micromanagement application for an investment banking utilizing Java, and Spring Boot (back end). The solution increased operational effectiveness by 40% and decreased human errors by 25%.

- Collaborated closely with cross-functional teams, including product managers and business analysts, to gather requirements and translate them into technical specifications.
- Collaborated with security teams to ensure compliance with banking regulations and implemented secure authentication and authorization mechanisms.
- Provided technical leadership and oversaw project execution from a technical perspective.
- Used Kafka and JMS for asynchronous messaging, and JMS for email notification.
- Used Hibernate to implement JPA to handle database connections efficiently.
- Used Soap and Rest for webservice implementations.
- Leveraged Liferay's capabilities to enhance user experience, streamline communication, and provide a centralized platform for diverse banking functionalities.
- Utilized Liferay's content management features to optimize information and collaboration within the organization.
- **Technologies**: Java, spring boot, Spring Security, JPA, Hibernate, JWT, Stripe Api, Apigee gateway, Eureka discovery service, Config server, Rest, Soap, Kafka, JMS, ActiveMQ, Jira, Star UML, GitHub, Postgres, MongoDB, Junit, Integration Testing, HTML, CSS, JavaScript, Angular, Tomcat, Maven, Windows.

**Role:** Software Engineer

August 2017 - April 2019 *Asmara, Eritrea* 

**Organization:** Brothers Computer Center

Client: Red Sea Trading Co.

**Project**: Red Sea Trading - Show real-time updates on Bonds, Treasuries, and Fixed Income, place orders, and personalize your trading strategies for execution.

- Developed robust RESTful APIs using Java and Spring Boot and used Kafka resulting in seamless communication between microservices and reducing integration issues by 40%.
- Developed a module for real-time market data, including Bonds, Treasuries, and Fixed Income.
- Implemented a trading module allowing users to place buy and sell orders. Supported custom trading strategies and market-making activities.
- Implemented user management functionalities, including user profiles. Allowed users to customize and save trading strategies for quick execution.
- Optimized database queries and data access layers, improving system response time by 30% and reducing database load by 20%.
- Conducted rigorous testing, including unit tests and integration tests, resulting in a 25% reduction in production defects and improved overall application stability.
- Leveraged Camunda workflow automation to streamline and optimize complex business processes, enhancing operational efficiency.
- Maintained code quality through proactive code reviews and adherence to coding standards, resulting in a 20% reduction in technical debt.
- Collaborated with the operations team to proactively monitor and resolve production issues, achieving a 99.9% system uptime and minimizing user impact.
- Used JMS for asynchronous messaging, and for email notification.
- Used Hibernate to implement JPA to handle database connections efficiently.
- Technologies: Java, Springboot, Spring MVC, Api gateway, Drools, OAuth2, Eureka discovery service,

Config server, Rest, JMS, ActiveMQ, Jira, Star UML, GitHub, JPA, Hibernate, PostgreSQL, MongoDB, Junit, Integration Testing, HTML, CSS, JavaScript, Angular, Tomcat, Maven, Windows.

**Role:** Lead Java Developer

March 2016 - August 2017 **Organization:** Brothers Computer Center

Asmara, Eritrea

Client: Eritrean Telecommunication

**Project:** Ewut - application for Eritrean Telecommunication, driving customer engagement and loyalty through enticing additional packages and rewarding loyalty based on consumption patterns.

- Participated in a team of developers in the design, implementation, and deployment of the backend and middleware components for a mobile operating system, ensuring optimal performance and seamless integration with front-end applications, including MongoDB databases to manage and store data efficiently.
- Designed and implemented RESTful APIs and web services using Java and Spring frameworks, enabling efficient data exchange between the mobile operating system and various external systems.
- Implemented CICD (continuous integration and delivery) pipelines using Jenkins, automating the build, test, and deployed on PCF, DevOps principle, resulting in a 30% reduction in release cycles.
- Integrated third-party services and APIs to enhance system functionality, such as payment gateways and push notification services, resulting in an enriched user experience.
- Collaborated with mobile app development teams to provide guidance and support in backend integration and middleware implementation, resulting in seamless end-to-end system functionality.
- Implemented Rest Api using Spring Web Flux to handle a high number of concurrent requests.
- Used Kafka and JMS for asynchronous messaging, and for email notification.
- Used Hibernate to implement JPA to handle database connections efficiently.
- **Technologies**: Java, SpringBoot, Spring Web Flux, Rest, Kafka, JMS, Jira, Confluence, Jenkins, PCF, version control (GitHub), MySQL, MongoDB, Junit, Integration Testing, Tomcat, Gradle, Windows.

**Role:** Operational Supervisor **Organization**: Abonosa Contracting & Engineering Co

Jan 2013 - November 2015 Khartoum, Sudan

- Led a team responsible for installation of electrical and network solutions.
- Created detailed electrical system designs, including lighting, power distribution, wiring layouts, and electrical equipment specifications. Analyzed project requirements and ensured compliance with local electrical codes and regulations.

**Role:** Java Developer Organization: Brothers Computer Center May 2010 - November 2012 *Asmara, Eritrea* 

Projects: Selam Hotel human resource application, Asmara Airport Flight control application

- Collaborated with cross-functional teams to implement full stack application, test, and debug web and desktop applications for clients in the hotel, restaurant, travel agency, and trading domains.
- Implemented responsive user interfaces using HTML, CSS, and JavaScript libraries like jQuery, ensuring a user-friendly and intuitive design.
- Conducted thorough unit testing using JUnit, identifying, and fixing software defects early in the development lifecycle and reducing post-release issues by 25%.
- Integrated applications with relational databases, utilizing SQL queries and database management systems like MySQL for efficient data retrieval and storage.
  - **Technologies**: Java, HTML, CSS, JSP, Servlet, jQuery, spring framework, JDBC, Hibernate, Rest, Slack, GitHub, MySQL, MS-SQL, HQL, Junit, Integration Testing, JBoss, IIS, Eclipse, Visual Studio, Windows.

## **Academic Projects**

# Maharishi International University, Fairfield IA (2023)

**Course Registration System:** Registration system enables students to view courses to register, request for a course of their choice, registrar assign students for a course. Used Scrum and SDLC methodologies, as framework Rest API, Spring boot, Hibernate, MySQL database and Swagger.

**Library System:** Application built to help librarian to register new members, checkout, and check in books for members, system prevent members to borrow new books if are not returned on due date. Utilized Spring MVC, Thymeleaf, HTML, CSS, JavaScript, Postgres database, Unit testing and Postman.

**Data Analysis System:** A microservice application that takes input from a data source. Then analyze and calculate the input with a certain algorithm and stream it to another microservice. Used Spring Boot, Apache Kafka, Kafka Stream, Config Service and Zipkin, Unit and Integration testing.

**Portfolio**: I have created a static website to highlight my profile using JavaScript, Html, and CSS. I deploy it in AWS with AWS services like Api gateway, lambda, SNS, and SES.