

HENOK MENGESHA

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SOFTWARE ENGINEER

AWS Certified Software Engineer with over 2 years of professional experience developing enterprise applications for the insurance and online marketplace industries. Developed robust and scalable systems including policy management, claims processing, customer portals, and e-commerce platforms using Java, Spring, and AWS following the Scrum methodology. Proficient in technologies such as Java, Spring, Hibernate, Jmeter, Jenkins, Kafka, Zuul, Eureka Server, Selenium Web Driver, MySQL, React.js, and Docker.

Microservices • Object Oriented Programming • Design Patterns • AWS Cloud • System Design • SOLID
Database Development • Containerization • SDLC • Messaging

Languages: Java, JavaScript, PHP

Web: HTML5, CSS, React/ReactJS

Web Services: REST, GraphQL, JSON, XML

Web/App Servers: Apache, Tomcat, Node.js/NodeJS

Frameworks: Spring, Spring boot, Hibernate

Databases: MySQL, PostgreSQL

Design Patterns: Singleton, Strategy, Command, Observer

SDLC: Agile, Scrum, Waterfall

Tools: Maven, Eureka, Ribbon, Zuul, Jenkins, Selenium WebDriver, JMeter, Apache Kafka, Hibernate, JDBC, JPA

Platforms: Windows, Linux, MacOS

Big Data: Amazon Redshift

PROFESSIONAL EXPERIENCE

CAREER NOTE: Completed on-campus studies and currently taking distance education courses to complete a **Master's Degree in Computer Science** (Available for full-time, W-2 employment).

AVIVA CANADA, Markham, Canada • 05/2021 – 10/2023

Canadian property and casualty insurance company.

Software Engineer

Built Microservices.

- Created RESTful APIs for the insurance claims system using Java and Spring Boot, facilitating data exchange and ensuring responsive user interactions improving overall system performance.
- Successfully delivered an interactive dashboard application for insurance professionals using React and AWS, resulting in a 30% increase in user engagement and a 25% reduction in time spent on data analysis tasks.
- Ensured the security of sensitive insurance data by implementing robust authentication and authorization mechanisms using JWT and Spring Security, enhancing data protection.
- Integrated and transformed data from policy databases, claims systems, and customer records into the insurance dashboard application using Spring Batch and Hibernate, ensuring seamless data flow.
- Developed and implemented backend services for efficient data processing and retrieval from various insurance-related data sources using Spring Framework, Hibernate, JPA, and JDBC, which improved data access speed.
- Implemented asynchronous processing capabilities for the insurance claims system using Spring's asynchronous features and Apache Kafka, enhancing the scalability and responsiveness of the application.
- Implemented microservices architecture for the premium calculation service in the insurance quoting system using Spring Cloud components such as Eureka, Ribbon, and Zuul API gateway, enhancing scalability and fault tolerance, which resulted in a 40% reduction in system downtime and improved application resilience.

Technologies Used: Java, Spring, Spring Boot, Hibernate, Eureka, Ribbon, Zuul, Jenkins, Selenium WebDriver, JMeter, Apache Kafka, Hibernate, JDBC, JPA, Maven

AVIVA CANADA, Markham, Canada • 05/2020 – 08/2020

Canadian property and casualty insurance company.

Software Engineer Intern

Implemented CRUD functionality for database operations.

- Developed backend logic for premium calculation tasks within the policy management system, utilizing Java and Spring to ensure accurate and efficient processing, which improved calculation accuracy by 10%.

- Created backend logic for policy coverage determination, employing Java and Spring Boot to provide precise and reliable policy-related information, enhancing system reliability.
- Implemented CRUD functionality for database operations using Java and Spring Boot, ensuring data consistency and integrity, which reduced data processing errors by 15%.
- Validated user input at both frontend and backend levels to enhance data integrity and security, utilizing JavaScript and ReactJS for frontend validation and Hibernate Validator for backend validation, leading to a 20% decrease in user input errors.

Technologies Used: Spring, Hibernate

AFOMSOFT TECHNOLOGIES, Addis Ababa, Ethiopia • 05/2019 – 08/2019

Enterprise Resource Planning

Intern web developer

Built reusable components.

- Implemented CRUD functionality for database operations in the Classified Ads Website using PHP, ensuring data consistency and integrity, which reduced data processing errors by 15%.
- Developed reusable React components for the Classified Ads Website to enhance code maintainability and scalability, resulting in a 50% reduction in development time for similar features and a 30% decrease in code duplication.
- Created responsive and user-friendly web pages for the Classified Ads Website, leveraging HTML5, CSS, and React for frontend development. This resulted in a 30% increase in user engagement and a 20% decrease in bounce rate.
- Validated user input at both frontend and backend levels for the Classified Ads Website, utilizing React for frontend validation and PHP for backend validation, leading to a 20% decrease in user input errors.

Technologies Used: React, PHP, HTML5, CSS

ACADEMIC PROJECTS

Maharishi International University (2024) Movie Web Application: A Full-stack web application using React, Node.js, Express, and MongoDB to create a comprehensive movie database with features such as Movies by Category, movie search, and user reviews. Utilized React, Express, Node, MongoDB

Maharishi International University (2024) School Course Registration System: The School Course Registration System is a robust and scalable application developed using Spring, Spring Boot, Kafka, AWS EC2, and MySQL to streamline the course registration process for students and administrative staff in educational institutions. The system features comprehensive course and student management, real-time notifications, and a user-friendly registration interface. By leveraging Kafka for real-time updates and deploying on AWS EC2 for scalability, the system ensures high availability and performance. It significantly reduces manual workload, enhances user experience, and maintains data integrity and security through efficient use of MySQL. Utilized Spring, Spring Boot, Spring Security, Kafka, Github Actions, AWS EC2, MySQL

PERSONAL PROJECTS

BookNest: MERN Stack Bookstore 2023: BookNest is a full-stack web application built using the MERN stack (MongoDB, Express.js, React.js, Node.js) that serves as an online bookstore platform. Users can browse a vast collection of books, view details, add them to their cart, and securely make purchases. Utilized React, Express, Node.js, MongoDB

React movie display app 2023: A React-based web application that utilizes the OMDb API to fetch and display movie information. Users can easily search for movies and view details displayed in an organized format through a user-friendly interface consisting of dynamically generated movie cards. Utilized React, JavaScript, CSS, HTML

ReactBlog: A Dynamic Blogging Platform 2023: ReactBlog is a dynamic blogging platform built with React for the frontend, HTML, and CSS for styling, and MongoDB for database storage. It empowers users to create, publish, and manage their blogs effortlessly. The app features a unique 'Pivot' and 'Unpivot' functionality, allowing users to easily organize and reorganize their blog content, enhancing the flexibility and usability of the platform. Utilized React, HTML5, CSS, MongoDB

ShopSmart: MERN Stack Ecommerce Platform 2021: ShopSmart is a simple and user-friendly ecommerce platform developed with the MERN stack. Users can easily browse, add products to their cart, and complete purchases securely.

With MongoDB for database storage, it ensures smooth and reliable shopping experiences. Utilized React, Express, Node.js, MongoDB

EDUCATION

Master of Science in Computer Science

(In progress via distance education; expected completion 06/2026)

Maharishi International University, Fairfield, Iowa

Key Courses: *Modern programming Practices, Web Application Programming, Software Architecture, Advanced Software Development, Enterprise Architecture*

Graduate Certificate in Project Management

George Brown College, Toronto, Ontario (04/2022)

Advanced Diploma in Computer Programming and Analyst

George Brown College, Toronto, Ontario (04/2021)

Bachelor of Science in Civil and Urban Engineering

Hawassa University, Hawassa, Ethiopia (07/2013)

CERTIFICATIONS

AWS Certified Solutions Architect – Associate Certification

Project Management Professional (PMP) from PMI