

BETSELOT ADERAW MIHERET

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[LinkedIn](#) | [Portfolio](#) | [Github](#)



FULL-STACK DEVELOPER

Main Technical skills: *Strong foundation in data structures and collections, **Java, Spring Boot, Microservices, ReactJS**, and **NextJS**, as well as proficient in databases and web services.*

Languages: Java, JavaScript, Python

Web: React, Next.js, HTML, CSS

Web Services: RESTful, Messaging

Web/App Servers: Tomcat, Firebase, AWS

Frameworks: Spring (MVC, Boot, Security, AOP, Data, HATEOAS, Envers, Hibernate, JPA)

Databases: MySQL, MSSQL, PostgreSQL

CICD: GitLab, GitHub

Tools: IntelliJ IDEA, Eclipse, Visual Studio Code, RabbitMQ, Postman, Maven, Git, Spring Tool Suite, Birt Report, jHipster.

SDLC: Agile (Scrum and Kanban)

Platforms: MacOS, Linux, Windows

Soft Skills: Teamwork, Leadership, and problem-solving

PROFESSIONAL EXPERIENCE

Master Thesis Researcher | Contract | [Fraunhofer](#), Bremen Mar 2025 – Aug 2025

- Developed an AI-driven, agent-based pipeline for constructing biomedical knowledge graphs from scientific literature
- Leveraged transformer-based models (BioBERT, GPT-4o, LLaMA) for biomedical entity and relation extraction
- Integrated NCI ontology for semantic validation and reduction of LLM hallucinations
- Designed modular agents for document cleaning, NER, relationship extraction, validation, and graph storage (Neo4j)
- Achieved high accuracy and diversity in relation extraction (entropy = 3.66 across 10 research papers)
- Enabled natural language querying of biomedical knowledge using a graph-based QA interface

Software Developer | Full-time | [Dulcian](#), Addis Ababa May 2022 – Jan 2024

- Contributed to the growth and success of a start-up by providing adaptable and resilient support in an environment lacking basic resources, helping the company become one of the most recognized in Ethiopia.
- Designed and developed secure, RESTful web-based applications using Java, Spring Boot, Hibernate/JPA, and implemented JWT authentication for service-to-service communication.

- Built a system audit for multiple modules using AOP, created an import interface to fetch data from Excel, and integrated Spring Security to streamline authentication and authorization.
- Collaborated on the development of the Integrated Time Attendance and Payroll (iTap) system used by over 825 governmental organizations, healthcare centers, and schools in the capital city, and served as Lead Developer on the Auto Dealer project, facilitating vehicle dealership.

Software Development | Remote | [Code Impact B.V.](#), Netherlands Oct 2021 - May 2022

- Creation of web applications, Maintenance, testing, and support of high-quality code and services
- Collaborated with clients to collect requirements and provide an implementation for the project. Responsible for implementing a clean architecture and, structured project. Participated in test-driven application development.
- Analyzed system and project requirements to create technical specifications, developed client-side RESTful web applications and Open-API endpoints, managed data storage and retrieval with MySQL and MongoDB, and implemented multiple Cron services.
- Responsible for writing unit testing using JUnit. Responsible for writing end-to-end testing using Selenium.

Software Developer | Full-time | [Dulcian](#), Addis Ababa Aug 2018 – Oct 2021

- Worked in a scrum team of 7, responsible for building 5 modules for the web App from scratch.
- Built the HR and payroll modules from scratch in Java, in a strict connection to the attendance module, developed to use the fingerprint to collect the working hours.
- Responsible for the implementation of SOLID and DRY principles, and the industry's best coding practices. Conducting weekly sprint meetings, testing and resolving bugs, and also occasionally meeting with the tenants to resolve their feature requests.

MAJOR PROJECTS

Auto Dealer:

A web application platform designed to automate stock, sales, and inspection management for auto dealers.

Technologies Used: Java, Spring boot, Reactjs, MYSQL

Fox Ahead extension:

A browser extension that will be used to gather LinkedIn profiles automatically for a given job.

Technologies Used: Java, JHipster, Spring Boot, Hibernate, PostgreSQL, OAuth, JWT.

Data Recording and Reporting Generation Application for ENT (Otolaryngology):

A web-based application integrated with a laboratory information system is used to generate a child's medical patient information.

Technologies used: Java, Spring Boot, ReactJS, PostgreSQL

ITAP (Integrated Time Attendance and Payroll System):

A web application integrated with a biometric System (Face and Fingerprint) for attendance and payroll system for the entire governmental organization located in Addis Ababa (over 1000 organizations).

Technologies Used: Java, Spring MVC, JSP, Selenium, MS SQL, Birt Project.

PERSONAL PROJECTS

Power ([Link](#))

Currently, I am working on a side project for a hobby to integrate a crypto payment system on a social media promotion platform.

Technologies Used: Next.js, Pocketbase, Firebase, CoinPayment

OGR (Oil and Gas Refinery Regulation System) ([Link](#))

A freelance work with 3 teams. A comprehensive regulatory compliance and management solution for the oil and gas industry, ensuring superior functionality and compliance with industry standards.

Technologies Used: Java, Jhipster, Spring boot, Reactjs, MYSQL

EDUCATION

Bachelor of Science in Electrical and Computer Engineering

Institution: University of Gondar, Gondar, Ethiopia

Year of Graduation: 2018

Master's in Computer Science and Software Engineering

Institution: Constructor University, Bremen, Germany

Year of Graduation: 2025

CERTIFICATION

React.js Essential Training ([Link](#))

Building Full-Stack Apps with React and Spring ([Link](#))

Introduction to Cloud Computing for IT Pros ([Link](#))

HONOURS AND AWARDS

Certificate of Appreciation ([LINK](#))

University of Gondar 30/05/2018

Certificate of Appreciation for Making a Face recognition system that can be used as the main gateway

Certificate of Recognition ([LINK](#))

University of Gondar 06/07/2018

Certificate of recognition of AFROBO's most continental Robot-soccer cup for representing Gondar University and competing in the African continental Afrobo robot soccer cup and finishing 2nd place.