

ABEL TRFNEH

Fairfield, IA 52557 • +1-641-233-2359 • trfnehabel@gmail.com
<https://www.linkedin.com/in/abel-hailu-a109752a7/>

BACK END ENGINEER

Experienced software engineer with over 5 years of experience in designing, developing, and deploying high-performance applications, including core banking and electronic identity solutions. Expertise in Node.js, Java/Spring Boot, React/Angular, MySQL/MongoDB, GraphQL/REST APIs, Docker, and CI/CD. Skilled in microservices, Agile methodologies, and third-party integrations, with a strong focus on scalability, security, and user experience.

- Data Structures and Collections • Object Oriented Programming (OOP) • Problem-Solving • Efficiency Improvement
- Microservices Architecture • API Design • Team Collaboration • Database Management • Data Integrity
- Performance Optimization • Regulatory Compliance • Agile Methodologies • Secure Data Handling

Languages: Java, JavaScript

Web: HTML, CSS, Bootstrap, jQuery, React, Node

Web Services: REST

Web/App Servers: Apache, Tomcat

Frameworks: Express.js, Spring Boot, Spring Data, Spring Security, Spring Cloud

Databases: MySQL, PostgreSQL, MongoDB

Design Patterns: Singleton, Strategy, Command, Observer, Facade, Factory Method, Proxy

SDLC: Agile, Waterfall

Tools: Maven, Gradle, Git, GitHub, Postman

Platforms: Windows, Linux, MacOS

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).

WAN'A TECHNOLOGIES, ADDIS ABABA, Ethiopia • 01/2019 – 02/2024

Wan'a Technologies is a leading software solution and consultancy company, dedicated to providing innovative and customized technology services.

Senior Software Engineer

Built Scalable Microservices

- Designed and implemented a secure, high-performance electronic identity system using a Microservices Architecture with Node.js and React.js, achieving 99.9% uptime.
- Engineered a comprehensive core banking system supporting account management, transaction processing, loan processing, and CRM using Java and Spring Boot, ensuring compliance with banking regulations.
- Developed backend services with Java and Spring Boot for secure and efficient transaction processing within the core banking system, improving transaction speeds by approx. 15%.
- Optimized MySQL database queries for high transaction volumes in the core banking system, improving data retrieval speed by approx. 20%.
- Created optimized backend services in Node.js for secure data handling within the electronic identity system, reducing data processing errors.
- Deployed the core banking system on a Virtual Private Server (VPS), implementing data encryption and secure access controls to enhance system security.
- Collaborated in constructing a user-friendly frontend for the core banking system utilizing Angular, providing seamless user interaction with banking activities.
- Developed efficient communication layers between distributed services and the front-end using GraphQL and RESTful APIs for the electronic identity system, improving API response times by approx. 25%.
- Built a responsive and intuitive user interface using React for the electronic identity system, improving user satisfaction.
- Designed and implemented high-performance microservices with CI/CD automation, optimizing backend services and API response times for systems like E-Identity, Patient Registration, Covid Tracker, and Election System.

Technologies Used: Java, Spring Boot, REST APIs, NodeJS, GraphQL, Angular, JavaScript, HTML5, CSS3, ReactJS, MySQL, MongoDB, VPS, CI/CD Pipelines, Docker, Kubernetes.

FREELANCE EXPERIENCE

Virtual Technology, Mekelle, Ethiopia • 01/2019 – 12/2021

An innovative software startup focused on developing cutting-edge technology solutions.

Full Stack Developer

Build microservices

- Implemented a streamlined case management system for the regional governmental court using Node.js, React, and SQL, improving case processing efficiency.
- Developed a secure user authentication and authorization module for the court system using Node.js and JWT (JSON Web Tokens), enhancing system security and preventing unauthorized access.
- Created a responsive and intuitive React-based user interface for the court system, significantly improving ease of use for judges, lawyers, and court staff by a significant percentage based on internal user satisfaction surveys.
- Optimized SQL database queries and schema design, leading to a 15% increase in data retrieval speed and reducing query execution times.
- Integrated a document management system into the court system using Node.js and a cloud storage solution, allowing for secure storage and retrieval of all case-related documents, decreasing document processing times.
- Built RESTful APIs using Node.js and Express to facilitate seamless communication between the court system's frontend and backend components, resulting in a 15% reduction in API response times.

Technologies Used: Node.js, React, RESTful APIs, ExpressJS.

INTERNSHIP EXPERIENCE

Mesfiin Industrial Engineering, Mekelle, Ethiopia • 09/2017 – 02/2018

A leading equipment manufacturing company in East Africa.

Junior Software Engineer

Full-Stack Engineer

- Developed an ERP system for Mesfiin Industrial Engineering, optimizing departmental operations and improving overall productivity.
- Collaborated with stakeholders to gather requirements and implemented features tailored to their needs.

Technologies Used: PHP, HTML, CSS, Bootstrap, Java EE

ACADEMIC PROJECTS

Maharishi International University (2024)

- **Job Portal:** Developed a dynamic job portal web application using Node.js and React, facilitating job seekers to explore job listings, submit applications, and manage profiles, while empowering employers to post openings and review candidates. Utilized Node.js, React.
 - **Banking System:** Developed a Core Banking System Framework project as part of an Advanced Software Design course. It centered on the seamless integration of diverse design patterns to craft a resilient and adaptable framework customized specifically for the intricate demands of banking systems. Utilized Java.
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EDUCATION

Master of Science in Computer Science

(In progress via distance education; expected completion 12/2026)

Maharishi International University, Fairfield, Iowa

Key Courses: Web Programming, Advanced Software Development, Algorithms, Enterprise Architecture

Master of Science in Cybersecurity

(Thesis approval pending, courses completed in 03/2021)

Mekelle Institute of Technology, Mekelle, Ethiopia

Key Courses: Cryptography, Application Security

BSc. in Software Engineering

Microlink Information Technology, Mekelle, Ethiopia (08/2018)