

Biruk Demissie

 birukdemissie23@gmail.com

 +251 90 681 7873

Profile

Backend Developer with strong background in Node.js and RESTful API design. 4th year Computer Science student at AAU with 350+ solved problems on LeetCode and solid knowledge of Data Structures and Algorithms. Co-founder of Nexus Tutorials, where I teach and mentor students and algorithmic problem-solving.

Education

Addis Ababa University — *B.Sc. in Computer Science*

Expected Graduation: 2026

- **Relevant Modules:**

Data Structures & Algorithms (DSA), Database Systems, Operating Systems, Software Development, Networking, Web Development, Computer Architecture, Cloud Computing, Algorithms & Complexity

- **Description:**

My studies in Computer Science provided a strong foundation in software development and system design. Courses such as Data Structures & Algorithms, Operating Systems, and Database Systems strengthened my problem-solving and coding skills. Advanced modules in Web Development, Cloud Computing, and Computer Architecture exposed me to full-stack systems and backend design. Networking, Software Development, and Algorithms coursework further enhanced my understanding of scalable and efficient software solutions. This curriculum, combined with practical projects, equips me to design and implement backend systems that address real-world challenges.

A2SV (Africa to Silicon Valley) — *Algorithmic Problem Solving & Software Engineering Program*

- Intensive training in advanced data structures, algorithms, and software engineering best practices
- Solved 340+ LeetCode problems, focusing on medium to hard challenges
- Strengthened mentorship and teaching skills through peer learning and group discussions

Internship / Experience

Co-founder & DSA Mentor – Nexus Tutorials

2025 – Present

- Co-founded Nexus Tutorials, a community-driven platform for teaching data structures and algorithms and front end and backend development.
- Mentor students in DSA, guiding problem-solving and coding best practices.
- Prepare and deliver tutorials, exercises, and mock coding challenges to strengthen algorithmic thinking.
- Assist students in solving LeetCode-style problems and developing efficient, optimized solutions.
- Foster a collaborative learning environment and support community engagement through mentorship sessions.

Lead Backend Developer – AA City Court Management System

2025 – Present

- Lead the backend development team for a city-level court case management platform serving Addis Ababa.
- Designed and implemented server-side architecture using Django, REST APIs, and JWT-based authentication.
- Oversaw integration with databases to manage case records, user accounts, and court schedules efficiently.
- Ensured system security, reliability, and scalability for multi-user environments.
- Managed and guided a team of backend developers, coordinated task assignments, and maintained production-level code quality.

- Collaborated with frontend developers and project stakeholders to deliver features on schedule and meet real-world requirements.

Technical skill

Programming Languages:	Python (Django, Flask), JavaScript (Node.js, Express), SQL, HTML/CSS,tailwind
Backend & Frameworks:	Django (REST APIs, JWT Authentication, ORM), Node.js, Express
Databases:	MySQL, PostgreSQL, MongoDB
Web & API Development:	RESTful API design, Authentication & Authorization (JWT), Server-side Logic,Middleware , Database designing
Tools & Version Control:	Git, GitHub, Docker, Postman
Data Structures & Algorithms:	Advanced DSA concepts, LeetCode problem solving (340+ problems solved), Algorithm optimization, Complexity analysis
Other Skills:	System design basics, Team leadership, Mentorship, Collaborative development

Projects

- Sunday School Management System:** Managed student records, attendance, and schedules using node and Mysql with role-based access.
- AA City Court Management System:** Lead backend developer; built Django REST APIs with JWT authentication and database integration for case management.

Language

English	fluent
Amharic	native
Geez	proficient