Akrm Al-Hakimi

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EDUCATION

Wayne State University

Detroit, MI

Bachelor's of Science in Computer Science, College of Engineering GPA: 3.83

January 2024 - December 2026

- President of AWS Cloud Computing Club
 - * Coordinated certification programs in collaboration with AWS, resulting in multiple students achieving AWS Cloud Practitioner and other foundational certifications.
 - * Hosted first ever AWS Hackathon at the University, coordinating with event managers and AWS to supply students with prizes and open their network to potential careers.
 - * Directed open-source initiatives through our GitHub organization, scaling project impact and fostering contributions from AWS Club chapters globally.

TECHNICAL SKILLS

Languages: Rust, C, C++, Java, TypeScript, JavaScript, Python

Databases: PostgreSQL, SQLite, MongoDB

Backend Frameworks and Tools: Node.js, Express.js, Django, REST API's, Microservice Architecture Developer Tools: Git/GitHub, AWS, Docker, Jenkins, GitHub actions, Bash(Scripting and Automation)

EXPERIENCE

Software Engineer Co-Op

February 2025 – Present

Cummins Inc.

- Designed and implemented low-level test frameworks in C and C++ for embedded vehicle ECUs, enhancing fault detection and reducing system errors during integration testing.
- Engineered Rust and TypeScript tooling to automate ECU firmware flashing and bulk test data processing, reducing QA cycles by 120+ hours while improving pipeline throughput for multi-team integration testing.
- Developed and maintained Jenkins automated testing pipeline to streamline CI/CD processes, improve test coverage, and reduce deployment time through efficient integration of unit, integration, and regression tests.
- Debugged and re-factored embedded software using C, CANalyzer and vTESTstudio, optimizing overall system load performance.

Data Engineering Co-Op

June 2024 - February 2025

Cummins Inc.

Troy, MI

Troy, MI

- Optimized SQL and ETL pipelines for enterprise manufacturing analytics, consolidating multi-terabyte datasets across Oracle/AS400, improving query performance and enabling near real-time dashboards.
- Assisted in the design and scaling of data pipelines to support data visualization and reporting solutions for manufacturing optimization.
- Developed end-to-end data solutions using Python, Qlik Sense, and Power BI to create stakeholder dashboards for key business metrics, including data preparation and ETL pipeline development.

Software Engineer Intern

 $June\ 2024-Sept.\ 2024$

Insurit Agency

Grand Rapids, MI

- Contributed to the architecture and deployment of a full-stack employee portal for client management, internal communication, and collaborative market research using JavaScript and Next.js.
- Built a secure, custom authentication system using JWT, bcrypt, and Next.js middleware, streamlining employee access and reducing login-related support requests by enabling faster, role-based sign-ins
- Optimized AWS infrastructure for scalability and performance, implementing best practices across EC2, S3, and RDS services, resulting in improved application response times and reduced operational costs.

Projects

 $Rlox \mid Rust$

June 2025 – Present

- Developed a fully functional language interpreter in Rust, based on concepts from Robert Nystrom's **Crafting Interpreters** (originally implemented in Java).
- Implemented comprehensive error handling covering lexical, parsing, runtime, and compile-time phases.
- Extended the language with additional features including ternary operators, first-class lambda functions, and improved expression parsing (e.g., comma operator precedence).