MICAH LEE MCCOLLUM

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⭗ github.com/m-lm

▬ Education ▬

University of Arkansas, Fayetteville   2023 – 2026
B.S. Computer Science, minor in Mathematics
Honors College
GPA: 3.9

University of Arkansas, Pulaski Technical College   2021 – 2023
A.S. Technology and Engineering
GPA: 4.0

Relevant Courses: Database Management Systems, Information Retrieval*,
Algorithms*, Artificial Intelligence, Honors Operating Systems, Honors
Programming Paradigms, Software Engineering

▬ Experience ▬

Research Assistant   Summer 2025
University of Arkansas, Fayetteville
Conducted research into knowledge graph-based retrieval-augmented
generation (GraphRAG) under Dr. Susan Gauch as part of my honors thesis on
retrieval methods for grounding LLMs with contextual reasoning. Performed
literature review, reproduced recent research papers, and refactored
experimental Python code.

Teaching Assistant   Summer 2025
University of Arkansas, Fayetteville
Assisted Dr. Susan Gauch as the sole teaching assistant for the accelerated
Programming Foundations I online course with 30+ students, grading C++
programming projects and providing student feedback during office hours.

▬ Projects & Skills ▬

TaprootDB   present
Designed and built a simple key-value store in C++ with minimal dependencies,
supporting data persistence via on-disk append-only logs with compaction,
compression and serialization. Currently working towards integrating
networking for a client-server interface in addition to command-line.

ShakesNet 2025

Created a Python program to generate temporal social networks of characters for all of Shakespeare's 39 plays weighted by co-relation frequencies, with visualization and file export functionality for external network analysis programs such as Gephi.

Minmath 2024

Built a minimalist full-stack website for mental math exercises using HTML/CSS/JavaScript on the frontend and Django on the backend with connections to a PostgreSQL database.

Discord Bot 2023

Wrote and deployed a Discord server bot that utilized third-party APIs and web scraping techniques to deliver content to users.

Skills: C++, Java, Python, JavaScript, HTML/CSS, SQL, Cypher, Linux, Git, Django, Docker

━━━ Awards & Honors ━━━

Taft, O'Neal, Geels Scholarship, University of Arkansas 2024 – 2026
Merit-based engineering scholarship awarded for academic excellence.

Chancellor's List (6x), University of Arkansas (2x), Pulaski Technical College (4x) 2021 – 2025
Recognized for earning a 4.0 term GPA.

Dean's List (2x), University of Arkansas 2024 – 2025
Recognized for earning a 3.75+ term GPA.

Published in *Milestones* **Academic Journal vol.17**, Pulaski Technical College 2021 – 2022
for "The Impact of Codebreaking During World War II"

Math Scholar Award, Pulaski Technical College 2021 – 2022

Outstanding Chemistry II Student Award, Pulaski Technical College 2021 – 2022