

# Admire Theophilus Madyira

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## EDUCATION

**Amherst College** | Amherst, MA | Bachelors

**Expected, May 2025**

- Double Major in Computer Science and Mathematics | GPA: 3.9/4.0
- Koenig Scholar | Selected for a merit-based, full-ride scholarship awarded to only five high-achieving, low-income students from Africa and Latin America each year

## EXPERIENCE

**Microsoft Corporation** | Redmond, WA

**May 2024 - Present**

*Software Engineer Intern*

- Create a framework to identify security and privacy issues in LLM models, addressing prompt injection and data leakage
- Build an AI-driven framework for automatic bug fixes and crash analysis to reduce the time engineers need to diagnose and resolve software issues using Python, TypeScript, and MaterialUI
- Conduct fuzz testing to detect security crashes in systems, improving overall system security and preventing potential breaches using C++

**Microsoft Corporation** | Redmond, WA

**May 2023 - August 2023**

*Explore Intern, Software Engineering & Product Management*

- Enhanced suggestion ranking system for the Edge omnibox, leading to improved address bar customization, increased user retention, and increased Bing revenue using C++
- Conducted experimentation to ensure the new browser feature would not affect Microsoft Bing's revenue

**Barnard Programming Languages Lab** | New York, NY

**June 2022 - August 2022**

*Software Engineer Intern, Self-Driving Cars*

- Awarded a Meiklejohn grant to research program synthesis
- Wrote code to control the motion of a self-driving car in a CARLA simulator and underwent code quality reviews
- Conducted Temporal Stream Logic synthesis (TSL) and wrote TSL specifications
- Attended regular standups to report on the progress of research and to provide feedback and advice to peers on research progress

## SELECT PROJECTS

- **File Compressor** | Optimized memory usage by implementing the Huffman encoding algorithm to compress text files
- **Movie Recommendation System** | Developed a personalized movie recommendation engine using Python and PostgreSQL based on user review history and preferences

## TECHNICAL SKILLS

- Java, C++, Python, Javascript, TypeScript, Git/Github, Data Scraping, Optimization, Statistical Analysis

## LEADERSHIP

**Amherst College** | MA, USA

**September 2022 – Present**

*Mathematics And CS Teaching Assistant*

- Hold biweekly evening help sessions, teaching ~20 students each session
- Assist with grading homework and exams for Calculus and Algorithms
- Develop study guides and other materials for student use
- Identify students who may be in need of academic support

**STEM Made Easy** | Harare, Zimbabwe

**April 2020 – October 2020**

*Founder | Stem Tutor*

- Provided tutoring in Computer Science, Physics, Chemistry, and Mathematics for 100+ Ordinary and Advanced Level underprivileged students via Zoom and Google Classroom during the COVID-19 lockdown when government schools were closed
- Communicated technical concepts effectively to students of varying skill levels despite the challenges posed by remote learning

## AWARDS & RECOGNITION

**Amherst College** | MA, USA

*The Walker Teaching Award*

**2023**

- Awarded for accomplishment and promise in teaching and tutoring mathematics or statistics

**Ministry of Education** | Harare, Zimbabwe

*Top Scorer*

**2020**

- 1st position (out of ~50,000 candidates) in the Advanced Level Final National Examinations (ZIMSEC)