Aimé C. Mugishawayo

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EDUCATION

Amherst College Amherst, MA

Bachelor of Arts in Computer Science and Math, Cumulative GPA:3.95/4

Expected May 2025

• Relevant Coursework: Data Structures and Algorithms, Artificial Intelligence, Security, Abstract Algebra, Analysis.

Sorbonne Université Paris, France

Study Abroad Semester, Semester GPA: 3.67/4

Jan 2024 - May 2024

• Relevant Coursework: Cryptography

PROJECT EXPERIENCE

Mammoth Rumble- A decentralized voting platform: Repository | Website

Node.js, React, Solidity, Ethers API, Bootstrap, Unit testing

• Built, unit-tested, and deployed a Web3 web app that leverages smart contracts on the Ethereum blockchain to offer verifiable and tamper-proof election results.

Intelligent Pacman bots: Repository

Python, Artificial Intelligence, Search Algorithms, Reinforcement Learning

• Created and tested AI Pacman agents using classical, adversarial search and reinforcement learning algorithms and won 100% of the test games. Then, built a multi-modal bot for a capture-the-flag contest and ranked 3rd out of 40.

Phase1- A steganography detection tool: Repository

Java, Statistical analysis, Image Manipulation

• Developed a command-line based tool that detects and decodes hidden information (text or images) embedded within innocuous source images by extracting and analyzing the least significant bits of every pixel channel.

WORK EXPERIENCE

Amherst College- IT Department

Amherst, MA

IT Desk Student Technician

Sep 2022 – Present

- Responded and captured 2700+ incidents in the ticket management system, resolving 2000+ of the issues and escalating others when appropriate; reimaged 250+ returned computers for redeployment.
- Ran 30+ Wi-Fi coverage surveys with Ekahau Analyzer to upgrade the college network, installed new 50+ access points and optical network terminals; increased student satisfaction in the network by 50%.

Amherst College- Computer Science Department

Amherst, MA

Tutor

Sep 2022 – Present

• Mentoring students 9 hours weekly on Object-Oriented Programming and the Java Collections and Graphics libraries.

LEADERSHIP EXPERIENCE

Amherst College- Office of Residential Engagement and Wellbeing

Amherst, MA

Community Advisor

Jan 2023 - Jun 2023

Enhanced community wellbeing in residence halls for 24 residents, organizing events and administering policy.

Artificial Intelligence in the Liberal Arts

Amherst, MA

Team Leader

Sep 2022 – Jun 2023

• Led the club's web development and outreach teams, established social media strategies and coordinated 6 events.

SKILLS AND INTERESTS

Software Development Tools and Disciplines

• Python, Java, TypeScript, React, Node.js, MySQL, Linux, Azure, and REST APIs.

Languages and Hobbies

- Bilingual in French and English; moderately fluent in Swahili
- Amateur in Pen-testing, piano, African dance, bodybuilding, and soccer.

AWARDS AND CERTIFICATIONS

#1 nationally in Computer Science in the 2019 Rwanda National Advanced Level Secondary School Exams.

Microsoft Azure Fundamentals.

Jan

Feb 2020 Jan 2025