Aimé Césaire Mugishawayo

cmugishawayo25@amherst.edu | Portfolio | GitHub | LinkedIn | (413) 437-6374

EDUCATION

Amherst College, Amherst, MA

Expected May 2025

GPA:3.95/4.00

Bachelor of Arts in Computer Science and Math

 Relevant Coursework: Data Structures, Algorithms, Artificial Intelligence, Machine Learning, Computer Systems, Computer Networks, Computer Security, Number Theory, Abstract Algebra, Real Analysis.

Sorbonne Université, Paris, France

Jan 2024 – May 2024

Study Abroad Semester

GPA: 3.67/4.00

• Relevant Coursework: Cryptography

PROJECT EXPERIENCE

Web and Game Development

NodeJS, ReactJS, Tailwind, HTML, TypeScript, Unity Engine, C#

- Developed a portfolio website and a full stack web video app with in-call chat features.
- Designed a Brick Breaker game, implementing collision detection and a scoring system.

Cybersecurity

RSA, DHM, OpenSSL, Python, Java, GDB, Assembly

- Developed cryptanalysis and steganography detection tools to decipher encrypted messages and extract data hidden in images.
- Modified program behavior by analyzing low-level code and crafting malicious inputs to execute buffer overflows

Artificial Intelligence and Machine Learning

Search Algorithms, Reinforcement Learning, SciKit Learn, Python

- Built and tested AI agents for a Capture-The-Flag contest; combined classical, adversarial search and reinforcement learning.
- Explored the relationship between soccer playstyles and performance by training and testing various machine learning models.

Computer Systems and Networks

Graph Algorithms, Network Protocols, RAM management, Java, C

- Created a simulated network, implementing error-mitigation, flow control, and routing protocols.
- Simulated a memory management unit, implementing efficient heap-allocation, garbage collection, and paging algorithms

WORK EXPERIENCE

Amherst College IT Department, Amherst, MA

Sep 2022 - Present

IT Service Desk Technician

- Responded to 2200+ incidents in SolarWinds ServiceDesk, troubleshooting and resolving 1000+ software and hardware issues.
- Manage 8+ public printers, promptly fixing jams, monitoring supply levels and replacing supplies as needed.
- Provided audio-visual technical support for 50+ events.

Technology Operations Specialist

Summer 2023, Summer 2024

- Conducted 30+ Wi-Fi surveys; collaborated with a network engineer and used the survey info to upgrade the college network.
- Played a key role during the CrowdStrike outage, restoring functionality to 40+ computers.
- Imaged 210+ returned computers, increasing efficiency in the hardware return and deployment process.
- Installed and configured 40+ wireless access points and optical network terminals.

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

Sep 2022 - Jun 2023

Team Leader

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

SKILLS

Tools

- Advanced in Python, Java, TypeScript, ReactJS, NodeJS, SQL, Linux, Azure.
- Developing proficiency in Docker, Kubernetes, REST APIs, Unit Testing, and Continuous Integration.

Languages and Interests

- Bilingual fluency in French and English.
- Trained in weightlifting and African and Caribbean dance.