# Mutendi C. Sambaza

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### EDUCATION

# Carleton University

Ottawa, ON

Bachelor of Science in Computer Science (Hons.)

Sept. 2022 - Expected May 2027

Awards: Award of Excellence for Internationals (2022), President's Scholarship (2022)

**Relevant Coursework**: Statistics, Abstract Data Types and Algorithms, Computer Systems, Operating Systems, Systems Programming, Discrete Structures, Fundamentals of Web Applications, Software Engineering.

## SKILLS

Programming Languages: Java, C/C++, Python, JavaScript, HTML/CSS, and SQL

Frameworks and Libraries: Node.js, JavaFX, Typed.js, NumPy, Pygame

Tools: AWS, Git, GDB, Valgrind, Vercel, Figma, OpenStack, VS Code, IntelliJ, Bloomberg Terminal, Microsoft Office Soft Skills: Strong interpersonal and communication skills — Team Player — Leader — Aptitude for learning new technologies — Detail-oriented — Reliable — Self-motivated — Problem Solver — Creative

#### Projects

JumpOVOr Game | JavaScript, HTML/CSS, GitHub, AWS (S3, Route 53, CodePipeline, CodeBuild)

- Developed an interactive browser-based interpretation of the Google Chrome game.
- Deployed the application on AWS S3, leveraging AWS Route 53 for DNS management and custom domain setup
- Integrated a CI/CD pipeline using AWS CodePipeline, reducing the deployment timeline by 80% through the automation of build, test, and deployment processes from GitHub.

## The Great Escape Simulation | C, Linux, Valgrind, GDB

- Developed a sophisticated text-based simulation game with advanced memory management, featuring two heroes escaping a hazardous environment filled with threats like birds and monkeys.
- Implemented **multi-threading** to create and manage predator and hero threads, enhancing responsiveness and simulation realism by **55**%+.
- Streamlined development workflow by leveraging Makefiles for automated compilation, Valgrind for memory leak detection, and GNU Debugger (GDB) for debugging, achieving a 90%+ reduction in compile and debugging time.

#### MediSeek | Java, JavaFX Microsoft Access, SQL

- Designed and implemented a **CRUD** hospital management system for South African medical facilities to reduce data redundancy during the pandemic.
- Applied Object-Oriented Programming techniques such as **inheritance and encapsulation** in the system's architecture, ensuring modularity, scalability, and maintainability.
- Prepared detailed technical documentation including system architecture diagrams and database schemas.

#### EXPERIENCE

## Customer Service Representative, Housing Dept

Aug. 2023 – Present

Carleton University

Ottawa, ON

- Effectively handled a high volume of customer inquiries through prompt responses via phone, email, and in-person interactions, providing personalized solutions
- Collaborated with multiple departments to resolve escalate student concerns, streamlining communication channels and facilitating quicker resolution of student issues.
- Identified and implemented process improvements that enhanced team efficiency and service quality during high-traffic periods.

#### Leadership and Professional Development

#### Founder and President,

March. 2024 – Present

Black Students in Tech Nexus

- Spearheaded initiatives to enhance career readiness and foster growth within the tech industry.
- Successfully onboarded members and organized networking events with industry professionals to build valuable connections.