Mutendi C. Sambaza

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EDUCATION

Bachelors of Computer Science (Hons.)

Ottawa, ON

Carleton University

Sept. 2022 - Expected May 2027

Year Standing: 3rd GPA: 3.7/4.0

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

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

Frameworks & Databases: React, Tailwind CSS, Flask, Node.js, ChromaDB

Developer Tools: AWS, Git, Docker, GitHub Actions, OpenCV, Bloomberg Terminal, Microsoft Office

Libraries: NumPy, Pygame, JavaFX, OpenAI API, GDB, Valgrind

Projects

Lokdin | Python, OpenCV, MediaPipe, Flask, TensorFlow, Keras, NumPy

- Led a team to secure **3rd place at the CUHacking Hackathon**, building a custom AI-powered engagement detection tool with applications in education, healthcare, and corporate workflows.
- Engineered **feature extraction pipelines**, implementing advanced algorithms for facial landmark detection, gaze tracking, and engagement classification, achieving **97% accuracy** on synthetic datasets for real-time insights.
- Developed **visualizations and heatmaps** to translate engagement data into user-friendly feedback, improving data accessibility and actionable insights.

Noted | JavaScript, Tailwind CSS, Python, OpenAI, ChromaDB, Flask, Docker

- Developed a **full-stack transcription platform** to enhance accessibility of educational content through annotatable YouTube and audio transcripts, with options for **PDF construction** for downloadable transcripts.
- Integrated OpenAI Whisper and YouTube API for automated, accurate transcriptions, with ChromaDB storing vector embeddings to enable **Retrieval-Augmented Generation (RAG)** for contextually relevant summaries.
- Built a robust Flask backend to manage API calls, handle **user sessions**, and ensure efficient data management, alongside a responsive UI.

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 95% through the automation of build, test, and deployment processes from GitHub.

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

- Successfully onboarded members and organized networking events with industry professionals to build valuable connections for over **30+ Students**.
- Spearheaded initiatives to enhance career readiness and foster growth within the tech industry.