Chikwanda Chisha

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EDUCATION

Dartmouth College, *Hanover, NH - Cumulative GPA: 3.73/4.0* **Jun 2026**

- *BA, Computer Science and Economics*
- Coursework: Programming and Computation, Object-oriented Programming (OOP), Calculus II & III, Introductory Statistical Methods.

Trident College *Solwezi, Zambia - Grade: A* **Nov 2021**

- *British A-Levels: Mathematics, Physics, Chemistry, Biology, and Further Mathematics*

Awards/Honors: $30k+ First Quantum Mine Limited (FQML) scholarship, Dartmouth Third Honors (2022-2023)

SKILLS & INTERESTS

Programming Languages: Python, Java, HTML5, JavaScript, CSS
Tech-stacks: Github, Git Flow (Version Control), React.js, Firebase
Skills: Unit Testing (PyTest), Machine Learning, Deep Learning, Microsoft 365, Canva, and Google Workspace.
Language: English (fluent), Bemba (fluent), Nyanja (intermediate), French (intermediate), Nigerian Pidgin (basic)
Interests: Real estate, afro dance, guitar, photography, NBA
Activities: ColorStack, Dartmouth Tech Consulting Group, Women in Computer Science, Dartmouth African Student Association

PROJECTS

Grade Analyst: a website providing relevant metrics from class grades

- Built a responsive and interactive user interface using React and integrated Firebase for real-time data storage
- Implemented statistical analysis features to calculate and display metrics such as mean, median, mode, and interquartile range

Sudi: speech tagging using the Viterbi Algorithm and Hidden Markov Model

- Implemented advanced speech tagging techniques, leveraging the Viterbi Algorithm and Hidden Markov Model trained on simple files and tested on the Brown Corpus dataset
- Achieved 96.5% accuracy for the trained Hidden Markov Model on the Brown Corpus dataset

Graphy: using Java Socket API and Threading

- Developed an interactive and real-time collaborative drawing platform using the Java Socket API and advanced multi-threading techniques(Concurrent Execution, Synchronization, Daemon Threads)
- Facilitated seamless collaboration among multiple users, enabling at least 5 users to produce and edit graphics in real-time

File Compressor: using Huffman Encoding Algorithm

- Developed an efficient File Compressor program utilizing the Huffman Encoding Algorithm
- Successfully implemented file compression, resulting in a reduction of over 45% in file size with 95% efficiency

GPS: a miniature campus "Google Maps" using breadth first search (BFS)

- Created a miniature Google Maps that finds the fastest route to a location on campus for the user.
- Achieved over 90% accuracy.

EXPERIENCE AND ACTIVITIES

Nerd Apply, *Virtual* **June 2024 – Aug 2024**

Frontend Developer

- Contributed to the creation and maintenance of responsive web apps using HTML, CSS, JavaScript, and React.js, ensuring cross browser compatibility.

Ernest Everett Just Research Program, *Dartmouth College - Hanover, NH* **May 2023 – Aug 2023**

Research Intern

- Secured $10k research funding for a Computer Science project
- Collaborated with a team of four to develop a deep learning ML model that adapts to a robot's external environments using NLP and carried out interpretative experiments to understand the inner workings of the models

Academic Skill Centre (ASC), *Dartmouth College - Hanover, NH* **Jan 2023 – June 2023**

Tutor - Calculus and Computer Science (Data Structures & Algorithms in Java)

- Implemented the teacher as facilitator methodology to elevate math and calculus teaching, leading to an average grade enhancement of one full letter grade for students
- Conducted individual assessments to identify students' strengths and weaknesses, providing targeted support that led to notable improvement in weaker areas

Collis Center, *Dartmouth College - Hanover, NH* **Sep 2022 – Present**

Event Production Staff - Head Technician

- Partnered with 8 teammates to organize, plan and execute event operations for various campus events while maintaining visual, light, and audio systems
- Fostered increased student participation in community activities, contributing to the overall student mental health indicators on campus