Chi Ndeh-Zama

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Education

Wayne State University, College of Engineering **Detroit, MI**
Bachelor of Science in Computer Science **May 2026**
Scholarship(s): Westminster Church of Detroit Berkho Scholarship
Language Experience: Python, C/C++, HTML, JavaScript

Professional Experience

NextEnergy **Detroit, MI**
Intern **May 2023 - Present**

- Created a web scraper using Python to pull alternative fuel prices for the quarterly alternative fuel price report that all Clean Cities and Communities coalitions conduct.
- Collaborated with HYFI Water Systems to design and integrate software, utilizing C programming, for a water level detection device city wide.
- Collaborated with ALBA Robot to develop an airport chair transporter, utilizing a LiDAR system for 3D mapping and spatial awareness of the airport environment, with system software programmed in C.
- Conducted research on electric buses at MTA Flint, understanding the performance of electric bus technology to inform decision making.

Personal Projects - chizama.com

My personal portfolio **May 2023 - Current**

BMI Tracker and Calendar Integration (Python)

- Developed a Python application that integrates a BMI tracking system with a calendar to track and visualize progress over time. Utilized customtkinter for the user interface and data handling.

Calculator Project (Python, customtkinter)

- Built a functional calculator using Python and the customtkinter library. Designed the interface and optimized calculations for user-friendliness, avoiding unnecessary features like image inverting to improve performance.

Game Collection (Python, JavaScript)

- Created multiple games using Python using the pygame library and JavaScript, including a Flappy Bird clone, a Snake game, and a Sliding Puzzle. Each game features custom logic and user interfaces tailored to different platforms.

Arduino/C++ Fire Fighting Robot

- Developed an Arduino-based Fire Fighter Robot utilizing flame sensors (IR) to detect fire sources and servo motors to control a water nozzle for extinguishing flames. Implemented decision-making algorithms to autonomously navigate towards fire detected by sensors.
- Programmed sensor inputs and motor controls in Arduino IDE, using conditional logic to adjust movement based on real-time sensor data, and integrated a servo-based water pump mechanism to aim and extinguish fire upon detection.

Leadership & Professional Development

National Society of Black Engineers Board Member **Detroit, MI**
Academic Excellence Chair **February 2023 - Present**

- Organize workshops, seminars, and training sessions to enhance the skills and knowledge of engineers within the organization. Facilitate certification programs and continuing education initiatives.
- Implement mentorship programs connecting experienced engineers with students and early-career professionals. Provide guidance, advice, and support to foster professional growth.

Other Skills and Interest

Skills: Microsoft Applications: (Excel, Word, & PowerPoint), Barber
Interest: Sports (Soccer, Basketball, Football, and Golf), Working Out, Gaming