

Uchenna Njoku

Personal Website | uchenna.c.njoku@gmail.com | [Github](#)

EDUCATION

Bethune–Cookman University – Computer Science Major, Mathematics Minor

expected graduation: May 2025

PROFESSIONAL EXPERIENCE

Amazon – Amazon Web Services

Software Engineer Intern, May 2023 – August 2023

- Architected the migration process of the internal AWS Network host generation workflow with automated pipelines, leveraging AWS Services such as **CloudFormation**, **CloudWatch**, **AWS Lambda**, and **Cloud Development Kit**, increasing site build speed by **40%**
- Increased robustness of **450+ AWS Network Centres** which run over **1 million** external services, resulting in increased reliability and manageability, implementing these changes using **Typescript**, **Java**, and **Python**
- Assisted in network host initialization and maintenance processes, implementing status checkers to allow for ease of tracking in a user friendly interface to monitor metrics

General Motors EcoCAR EV Challenge

Software Engineer (Connected and Autonomous Vehicles (CAVS)), 2023

- Engineered advanced vehicle control algorithms using **MathWorks MATLAB** and **Simulink**, enhancing vehicle performance and energy efficiency, utilising **dSPACE** for simulations in order to validate strategy implementations.
- Refined vast datasets from onboard sensors, applying **Fourier** and **Wavelet transforms** for noise reduction, leveraging **Principal Component Analysis** and **t-distributed stochastic neighbour embedding (t-SNE)** for data parsing with **machine learning predictive models** to glean insights into vehicle health and energy consumption.
- Implementing efficiency-oriented solutions and innovations to address the challenges inherent in electric vehicles over the four-year EcoCar EV competition as part of the **Connected and Autonomous Vehicles (CAVS)** subteam.

DXV Studios

Freelance Web Developer, 2019–2023

- Utilised **HTML**, **CSS**, **Javascript**, and **SQL** in the development of dynamic websites for clients
- Leveraged frameworks such as **React**, **Angular**, **Spring**, and **ExpressJS** to modernise site architecture with scalability in mind
- Incorporated **Adobe Creative Suite**, **Figma**, and **Blender** in wireframing and brand identity design.

SKILLS

Languages: JavaScript • C++ • Python • Java • HTML • CSS • TypeScript • Go • C# • SQL • GraphQL • UNIX/Bash

Technologies: ReactJS • NodeJS • Angular • TensorFlow • Linux • Spring • Docker • MongoDB • Tailwind

PERSONAL PROJECTS

Munchies' Recipes [Website](#) | [Github](#)

- Developed a responsive web application to fetch recipes for thousands of dishes with the Spoonacular API.
- Designed the overall website concept and layout, leveraging **Figma** and the **Adobe Suite**.
- Architected with **React**, **Node.JS**, **HTML**, **CSS**, and **JavaScript**, deployed on **Heroku**.

Spotify Playlist Generator [Website](#) | [Github](#)

- Created a Python automation tool that converts a Youtube playlist into a Spotify playlist.
- Developed utilising **Python**, **HTML**, and **CSS**, leveraging the **Flask** framework, and deployed on **Heroku**.
- Implemented in conjunction with the **Spotify API** and **Youtube Data API**.

MyFitnessBro [Github](#)

- Engineered a calorie-tracking mobile application that visualises the caloric intake required for a user to achieve a set caloric goal given the food intake for the day.
- Architected the full stack using **MongoDB**, **Express**, **React-Native**, and **Node.JS** to implement **CRUD** operations.

INVOLVEMENT/ACTIVITIES

Jamaica Mathematical Olympiad

- Placed 3rd out of a 2000+ students in the National Mathematical Olympiad held by the University of the West Indies,
- Selected to represent Jamaica at the XVII Central American and Caribbean Mathematical Olympiad

IEEE Robotics Society

- Led team to 1st place in Florida and 5th place nationally at the IEEE Southeast Conference by designing, building and programming a 4-wheel drive robot for the hardware challenge, and excelling in the software competition.