Amadou Diallo

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EDUCATION

Georgia Institute of Technology (OMSCS) | Atlanta, GA Remote

Master of Science in Computer Science. Machine Learning Specialization — **Expected December 2026**

Oregon State University | Corvallis, OR

Bachelor of Science in Computer Science | GPA: 3.7/4.0 — **August 2024**

Georgia State University | Atlanta, GA

Bachelor of Science in Chemistry. — **January 2020**

PROFESSIONAL EXPERIENCE

Data Analyst | HAHB | Austell, GA — **2023-2024**

- Implemented a script in Python and SQL to automate the handling of customer data and payments. It improved customer satisfaction by 90%, significantly speeding up the process. Reduced manual processing time by 20 hours per week.

PROJECTS

Top-n-Music-Genre-Classification-Neural-Network | Python, ML libraries — **August 2024**

- Collaborated with a team of 3 and developed a fully functional dataset containing song metadata, genres, and spectrogram information to facilitate genre classification.
- Developed a pipeline to import audio clips from various datasets and trained a Convolutional Neural Network (CNN) to predict music genres with high accuracy.
- Utilizing technologies such as Keras, TensorFlow, and Librosa, I implemented a program that processes user-submitted audio clips and outputs a formatted list of predicted genres ranked by confidence.

Dragon's Database system | SQL, JavaScript, Handlebars, React — **March 2024**

- Developed a website with comprehensive CRUD (Create, Read, Update, Delete) functionalities for managing entities such as Abilities, Environments, Types, and Dragons. The system supports browsing and displaying these entities, as well as adding new entries.
- Implementation of a many-to-many relationship, handling nullable foreign keys and updating M:N relationships, incorporation of dynamic dropdowns in the Dragons table to allow seamless selection of Types and Environments, enhancing user interaction and data integrity.

BigShell command language interpreter | C — **May 2024**

- Parsed command-line input into commands to be executed, executed a variety of external commands (programs) as separate processes, implemented a variety of shell built-in commands within the shell itself
- Performed a variety of i/o redirection on behalf of commands to be executed, assigned, evaluated, and exported to the environment, shell variables
- Implemented signal handling appropriate for a shell and executed commands, managed processes and pipelines of processes using job control concepts

Treasure Hunt with location permission | Kotlin — **July 2024**

- Developed a treasure hunt app using Android Studio, integrating GPS location services, and the Haversine formula for accurate location tracking and proximity detection.
- Implemented user interface elements such as permission handling, scrollable game rules, location-based clues, animated timers, and conditional feedback based on user progress through the hunt.
- Utilized ViewModels and StateFlow architecture for efficient state management, ensuring smooth transitions between game screens and consistent user experience.

TECHNICAL SKILLS

Programming Languages: Python (Advanced), C (Advanced), Kotlin (Advanced), SQL (Advanced), HTML (Advanced), CSS (Advanced), JavaScript (Advanced), React (intermediate), x86 assembly (Intermediate).
Libraries/Technologies: NumPy, Keras, TensorFlow, Librosa, Node.js, Flask, Handlebars, MongoDB, phpMyAdmin, Git, GitHub, Vim, Excel, Tableau, Power BI

ACHIEVEMENTS

Honor Roll — **2023-2024**

- Maintained a 3.7 GPA for every term during these years at Oregon State University while completing a BS in Computer Science.