MODUPE AWOJUYIGBE

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EDUCATION

University of Texas San Antonio **San Antonio, TX**
- Bachelor of Science in **Computer Engineering** – GPA: **3.7/4.0** *May 2027(Expected)*

Relevant Coursework: Digital Logic Design, Network Theory, Applied Engineering Analysis II, Micro Computer Systems

PROFESSIONAL EXERIENCE

EDP Renewables **May 2025 – Present**
Engineering Intern, Houston TX
- Automated **SCADA** status monitoring across wind and solar fleets using **Python** with **Pandas, BeautifulSoup,** and **Selenium**, enhancing real-time data visibility and enabling faster issue detection by **80%**.
- Validated telemetry data and tested control systems for **Renewable Energy Management System (REMS)** projects, reducing errors by **70%**, which improved system accuracy and operational reliability.
- Developed a **Flag list** and completed consistent tag mapping using the **DNP3 protocol**, improving communication accuracy.

University of Texas at San Antonio **August 2024 – Present**
Teaching Assistant / Peer Educator, San Antonio, TX
- Provided technical mentorship to over **50+** students in foundational engineering and **STEM** courses.
- Delivered personalized tutoring sessions for students enrolled in **Calculus, Physics, and Programming** courses, emphasizing practical applications in engineering concepts.
- Created supplementary learning materials to illustrate real-world engineering applications of theoretical concepts.
- Overall increased the number of returning students by **60%** due to learnings from my teachings.

Code Path Web Development **February 2024 – August 2024**
Web Developer, San Francisco, CA
- Engineered a fully functional fashion web application utilizing **HTML**, **CSS**, **JavaScript**, and **Flexbox**, which was used by over **100+** users at launch
- Implemented backend functionality using **Firebase Authentication, Storage,** and **Cloud Firestore** for database management, enhancing data retrieval efficiency by **40%.**
- Collaborated effectively with peers from cross-functional teams and mentors to troubleshoot issues and ultimately deliver a high-quality application.

SKILLS & CERTIFICATIONS

- **Technical Skills:** C, C++, Python, JavaScript, MATLAB, Arduino, Multism, CAD, Firebase, Automation Scripting, Structured Text, File I/O, DNP3.
- **Business skills:** Technical Communication, Cross-functional Team Collaboration, Project Management, Mentorship.
- **Organizations:** National Society of Black Engineers (NSBE), Society of Women Engineers (SWE), Institute of Electrical and Electronics Engineers (IEEE), Girls Who Code (GWC), Rewriting the Code (RWC).
- **Awards:** President's List, Dean's List, Women in Toys Scholar, Klesse College Scholar.

LEADERSHIP

UTSA National Society of Black Engineers (NSBE) **May 2025 – Present**
Executive Board - Senator
- Represent the UTSA chapter at regional and national meetings, advocating for student needs and initiatives.
- Collaborate with the executive board to enhance member engagement and streamline communication across committees.
- Help coordinate outreach, programming, and professional development events to increase participation and impact.

TECHNICAL PROJECTS

Real-Time Voice Captioning and Translation System **Spring 2025**
- Designed a real-time captioning and translation system using a **PIC16F1829 microcontroller** and **Python** serial communication.
- Developed a speech-to-text pipeline in **Python** to transcribe audio and send formatted captions to an **LCD** via the PIC.
- Implemented multilingual translation support using **Google's API,** enabling conversion between **100+** languages.
- Pivoted from an initial laser mic concept to a more feasible, impactful solution focused on accessibility and usability.

Autonomous Line Tracking Vehicle **Fall 2024**
- Engineered a fully autonomous mini vehicle utilizing infrared sensors and **C++** programming to enable precise path detection and following capabilities.
- Designed and implemented a control system architecture integrating microcontrollers with motor drivers to achieve responsive navigation with **<2ms** latency.
- Documented comprehensive technical specifications, system architecture, and implementation methodology for future reference and knowledge sharing.