

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 EXPERIENCE

EDP Renewables

May 2025 – Present

Engineering Intern, Houston TX

- Programmed automation scripts in **Python**, enhancing **SCADA** communication status monitoring across wind and solar plant fleets, improving data visibility by **70%**.
- Performed telemetry validation and control testing for **Renewable Energy Management System (REMS)** projects, contributing to a **50%** reduction in system errors
- Assisted with plant control configuration, simulation, and substation testing, ensuring system reliability and efficiency

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.