TEMITAYO ADEROUNMU

Location: Arlington, TX | Cell: 682-408-3838 | Email: aderounmutemitayo@gmail.com | LinkedIn

Education

University of Texas at Arlington – College of Engineering | College of Business | College of Science

Bachelor of Science in Computer Engineering August 2020 – May 2024

Courses: Algorithms and Data Structures, Signal Processing, Operating Systems, Assembly Language, Embedded Systems, Unmanned Vehicle Systems, Electromechanical Systems and Sensors, Advanced Digital Logic Design.

Merit-Based Presidential Scholarship at UTA For Fall 2020 to Spring 2024

Minor in Information Systems June 2022 – May 2024

Courses: Advanced Application Development, Database Management, Information Systems Analysis.

Minor in Mathematics January 2021 – May 2024

Activities: Member of Alpha Lambda Society (ALD), UTA Volunteers, NSBE, and SWE.

Skills & Certifications

Languages/Frameworks: Python, C, Embedded C, Java, SystemVerilog, Verilog, HTML/CSS, JavaScript, ARM assembly
Peripherals/Protocols: UART, ADC, DAC, I2C, SPI, Timers/Counters, PWM, GPIO, JTAG
Design/Prototyping tools: Figma, Adobe Illustrator, Wireframing, UX/UI Design, Prototyping
Circuit Design/Software: Code Composer Studio, Altera Quartus Prime, LTSpice, Matlab & Simulink, PCB Design, Vivado

- C++, SQL	**- Machine Learning**	**- Autodesk Inventor**	**- English, Yoruba, Spanish**
- Full Stack, React JS	**- Amazon Web Services**	**- Digital/Analog Circuitry**	**- Microsoft Office**

Projects

State Farm Automobile Fraud Detection Software | https://github.com/temitayoaderounmu/SMARE **Fall 2023**

Developing a robust Social Media Automobile Scam Detection System for State Farm's Senior Design project. Implementing daily risk notifications, data scraping from multiple selling websites, and comprehensive data storage, filtering, and visualization capabilities. Ultimately, the system aims to generate repeatable interactive reports to mitigate loss severity and frequency within the auto insurance industry, providing actionable insights to enhance operational efficiency and customer satisfaction.

Sound System Device | Course: Embedded Systems **Spring 2023**

Designed a low-power device to solve the angle of arrival (AoA) problem, typically requiring extensive computational resources. The problem was addressed using limited computational capabilities. It features a command line interface for system configuration, status reading, and angle information which can be used for practical applications like gunshot direction detection and speaker direction determination.

Eight-bit Four Functions Calculator | Course: Advanced Digital Logic **Spring 2023**

Design implemented on the DE10-Lite + Keypad (+Hex Board), and tested an eight-bit, four-function calculator. Demonstrated an ability to design, implement, and test a machine that incorporates combinational and sequential logic circuits implemented with field programmable logic arrays (FPGAs) and designed with the System Verilog hardware description language (HDL).

Enhanced DTMF Tone Recognition System | Course: Discrete Signal Processing **Fall 2022**

Developed a MATLAB-based system for recognizing DTMF tones with improved signal clarity. Utilized Discrete Fourier Transform (DFT) for frequency analysis and noise reduction. Implemented precise key identification based on DTMF tone frequency specifications, enhancing accuracy. Conducted rigorous testing for performance evaluation, achieving significantly improved signal clarity and key detection accuracy.

Pulse and Respiration Monitor Device | Course: Embedded Systems **Fall 2022**

Involves the design and implementation task to incorporate different software and hardware components to make a pulse and respiration monitoring device. Built a device capable of observing pulse and respiration in humans using optical reflection and strain gauge components.

Professional Experience

Research Assistant **| UTA Hybrid Atelier, UT Arlington, TX | January 2021 – May 2023**

Contributed to creative technology research at The Hybrid Atelier, a multidisciplinary maker space bridging Arts, Engineering, and Sciences. Collaborated with graduate students on ongoing projects, proposed innovative ideas, and delivered insightful presentations on independently analyzed research papers to both lab members and professors.

Content Coordinator **| Olutunu, Dallas TX | February 2020 – April 2022**

Led the creation of the textual content for the company's app, ensuring alignment with brand aesthetics. Conducted thorough inspections of crucial documents for grammatical accuracy, providing edit suggestions to maintain high quality standards.

Media Systems Analyst **| CCC Canaanland Parish, Irving TX | June 2018 - Present**

Responsibilities extend beyond content management to encompass conducting comprehensive risk assessments, ensuring alignment with industry standards and security protocols.