

NEIL JUANILLO

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EDUCATION

The University of Texas at Dallas

Bachelor of Science in Electrical Engineering | Expected: June 2027

- **GPA:** 3.4
- **Relevant Coursework:** Electrical Network Analysis, EE Lab Fundamentals, Probability, Digital Circuits

TECHNICAL SKILLS

- **Programming & Software:** MATLAB, LTSpice, C++, Visual Studio
- **Hardware & Lab Tools:** MSP432, Arduino, 74LS595 Shift Register, Temperature Sensors

ENGINEERING PROJECTS

LED Pattern Control Using Shift Register | Arduino & 74LS595

- Programmed Arduino to **generate dynamic LED patterns using three control pins**
- Optimized bit-shifting operations to **drive eight LEDs via a 74LS595 shift register**
- **Implemented custom lighting sequences** by manipulating serial-in, parallel-out logic

Joystick-Based Display System | MSP432 Microcontroller & 7-Segment Display

- Interfaced an analog joystick (MKII Booster Pack) with MSP432 microcontroller
- **Processed X/Y-axis readings** and displayed real-time values on a **7-segment display**
- Integrated a **7-segment decoder** to **convert binary joystick data into readable output**

Temperature Sensor System | Arduino

- Designed a **temperature sensor circuit** using a **thermistor, capacitor, and Arduino 5V supply**
- Programmed Arduino to **convert raw sensor data to Fahrenheit** for real-time monitoring
- Configured a **high-temperature alert** system that triggers an **LED when $\geq 80^{\circ}\text{F}$**

WORK EXPERIENCE

Walmart | Night Stocker (Aug 2022 – May 2023)

- Managed **inventory stocking and organization** in high-demand retail environments
- Assisted with **supply chain operations**, ensuring timely restocking of critical items
- Developed **teamwork and problem-solving skills** by efficiently handling inventory shortages

Albertsons | Stocker & Night Stocker (Sep 2021 – Aug 2022)

- Organized store aisles and maintained accurate **inventory tracking**
- Worked collaboratively to meet nightly **stocking deadlines** in a fast-paced setting
- Strengthened **attention to detail** by ensuring product placement and rotation

