

DANIELA BASURTO ARMIJO

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SKILLS

Languages & Tools: Python, C++, MATLAB, ROS (Linux), PLC (Toyopuc), TensorFlow, ReactJS, HTML, CSS, Git, PSpice, LabView, KiCad, Altium, Fusion 360, OnShape, Microsoft Power Apps, Microsoft Power Automate, Power BI

Hardware & Systems: Arduino, ESP32, ESP8266, Raspberry Pi, Custom PCB Design, RFID Modules, Analog & Digital Sensors

Soft Skills: Teamwork, Leadership, Adaptability

EDUCATION

The University of Texas at San Antonio | **Bachelor of Science in Electrical Engineering** | Graduation: Summer 2025 | GPA 3.7

EXPERIENCE

Toyota Motor Manufacturing Texas – Engineering Co-op

Feb 2025 – May 2025

- Developed and optimized PLC logic to streamline repair vehicle buffer operations and reduce interruptions in production line.
- Designed a digital maintenance checker via Microsoft Power Apps to eliminate paperwork and improve data logging.

Nagarro Texas – Software Development Intern

June 2023 – Aug 2023

- Built a web application with a GUI, database, and chatbot API integration.
- Strengthened frontend and backend skills through collaborative agile development.

SEO Tech Developer Internship

June 2022 – Aug 2022

- Developed a static web app using the Spotify API to display user listening stats.

NSF REU – Robotics & AI Research Intern

June 2024 – Aug 2024

- Engineered the computer vision for an industrial robotic arm to detect, pick, and place objects on a conveyor system.
- Implemented reinforcement learning algorithms (Q-Learning, DQN) to optimize control policies.

UTSA REU – AI/ML Research Intern

Aug 2022 – Dec 2022

- Trained an AI model to detect and classify local traffic signs using Raspberry Pi and TensorFlow.
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PROJECTS

Smart Digital Inhaler (Capstone Project)

Aug 2024 – May 2025

- Developed a compact, sensor-rich PCB for a digital inhaler that monitors usage, air quality, and orientation of the device.
- Led embedded system integration for real-time data capture and user feedback.

Custom 3D Printing Business – Co-founder

Aug 2024 – July 2025

- Created a custom IR LED controller to repurpose unused LEDs and improve production of LED boxes.

Automated Dog Ball Launcher

June 2024 – Aug 2024

- Build a microcontroller-based launcher using proximity sensors and speed control logic.

PCB LED Keychains

spring 2024

- Designed and fabricated custom PCBs for student outreach and workshops for my student organization.
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LEADERSHIP & INVOLVEMENT

- **Robotics and Automation Society**, Vice President (2024– 2025), Recruitment Coordinator (2022-2024)
- **IEEE Member**, Since 2021
- **UTSA College of Engineering Ambassador** (2021– 2025)