

# Victor Santana

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## RELEVANT SKILLS

- Hardware & Software Tools: Arduino & IDE, STM32 & CubeIDE, GitHub, ChatGPT (Ask mode), VS Code Copilot (Ask mode), LTSpice, Logisim Evolution, Oscilloscopes, Function Generators, Soldering
- Programming Languages (in order of proficiency): C#, C++, Python, C, Assembly
- Management & Soft: Scheduling, Team Management, Team Training, Spanish Language

## EDUCATION

### Bachelor of Science in Computer Engineering

September 2023 - December 2027

Brigham Young University - Idaho

Rexburg, Idaho

- Certificates: Computer Programming & Embedded Systems
- 4.0 GPA
- Scholarship: Brigham Young University-Idaho Grant 2025-2026 (Acknowledgement of Academic Excellence)
- IEEE Student Society Vice Chair
- Relevant Courses: Hardware & Electronics: Microprocessor Based System Design, Fundamentals Digital Systems, Electric Circuit Analysis I. Software & Algorithms: Classes, Data Structures, Algorithm Design, C, C++, C#, Python

## PROJECTS

### Food Storage Management System | Personal

November 2024 - September 2025

- Built a food storage tracking system to help users organize expiration dates by designing a file-based architecture in C#, resulting in minimized food waste
- Implemented an automated email notification system, ensuring users received timely alerts for 100% of expiring items, leading to increased user engagement
- Developed a robust input validation system with custom error handling and conditional logic to prevent incorrect entries, reducing input errors by 90%

### Microcontroller-Based Battery Voltage Meter | ECEN 260

January 2025 - April 2025

- Established UART communication to create a command-line interface via PuTTY, enabling a user to remotely select 3 battery types (VIEW\_1.5V, VIEW\_3V, VIEW\_9V) and send system commands (RESET)
- Implemented the I2C protocol to interface with an LCD1602 display, providing a real-time user interface for voltage and charge percentage
- Engineered an analog input stage using a voltage divider circuit to safely scale 9V inputs for the microcontroller's Analog-to-Digital Converter (ADC), protecting the 100% of hardware from overvoltage damage
- Authored and executed a comprehensive 8-scenario test plan to verify system accuracy, LED feedback, reset functionality, and edge-case handling (e.g., measuring an incorrect battery type)

## EXPERIENCE

### Faculty Technology Center Lead

January 2025 - Present

Brigham Young University - Idaho

Rexburg, Idaho

- Improved and maintained 100+ online courses within an LMS, applying systematic problem-solving to resolve configuration issues, enhance reliability, and optimize end-user experience
- Collaborated in a dynamic team environment, utilizing various 5+ technologies to complete tasks efficiently and adapt to evolving project goals
- Led and coordinated a 20+ member team, assigning tasks, conducting targeted one-on-one technical training, and achieving a 100% success rate in office appointment resolution
- Developed and deployed 25% of BYU-Idaho's online courses each semester, ensuring scalable, standardized, and high-quality delivery across Canvas and supporting platforms
- Exceeded weekly deployment targets by 120% by optimizing setup workflows and leveraging automation, delivering 10+ complete 14-week courses per week with high accuracy