Marlon Mancilla

Professional Summary

Physics graduate from Utah Valley University with a passion for engineering development and testing. Experienced in embedded systems, Arduino, programming, and data analysis. Over 4 years of teaching experience with strong communication and presentation skills. Quick learner and problem-solver, excited to build impactful solutions.

Technical Skills

- Languages: Python, C++, MATLAB.
- Data Tools: Pandas, NumPy, Matplotlib.
- CAD: SolidWorks, AutoCAD, OpenSCAD.
- Hardware: Arduino, Embedded Systems, Circuit Design.
- AI: Large Language Model (LLM) Integration.
- Soft Skills: Project Management, Communication, Teaching.

Experience

AI Prompt Engineer

Outlier

Aug 2023 - Jun 2024

- Designed and refined AI prompts to enhance model responsiveness and accuracy.
- Conducted iterative testing to optimize prompt templates across various use cases.
- Collaborated with product and engineering teams to improve end-user interactions.

<u>Undergraduate Researcher</u> Utah Valley University, Orem, UT Nov 2021 – Oct 2024

- Built Python-based data acquisition systems, improving research efficiency by 25%.
- Designed experimental setups using SolidWorks, AutoCAD, and OpenSCAD.
- Led engineering teams and managed electronics prototyping from schematics to testing.

Teaching Assistant & Tutor Utah Valley University, Orem, UT Aug 2021 – Oct 2024

- \bullet Improved student grades by 30% through targeted support and peer-led study sessions.
- Created collaborative and interactive learning environments.
- Developed educational tools to simplify complex concepts.

Education

Bachelor of Science in Physics

Utah Valley University, Orem, UT

Aug 2020 - Aug 2025