

Marlon Mancilla

Physicist — Testing Engineer — Development Engineer

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 [linkedin.com/in/mmarlon](https://www.linkedin.com/in/mmarlon) | Portfolio

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.

Undergraduate Researcher

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

- 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 2021 – Aug 2025