Marcos Marroquin

Seattle, WA | marcosvmarro@gmail.com | (509) 608-6878

Education

University of Washington Seattle, WA
BS Physics & Astronomy. GPA 3.7/4.0
Relevant Coursework:

- ASTR 300: Python for Astronomy
- CSE 160: Data Programming
- (IP) ASTR 480: Astronomical Data Analysis
  - CCDs, image reduction & analysis, and FITS files with DS9 & Python
- (IP) ASTR 324: Astrostatistics and Machine Learning in Astronomy
  - Bayesian statistics, sampling techniques, pandas/scipy/numpy

Experience

University of Washington Seattle, WA
ADMX Undergraduate Research Assistant July 2025 - present

- Ran COMSOL thermal simulations to improve the equilibrium temperature of experiment's cryogenic equipment **by 150%** to allow for better noise calibration
  - Publication set out to publish this summer
- Assisted with helium leak tests, vacuum plumbing, and machining parts
- Performed linear and nonlinear regression analysis to model temperature trends

Activities

Poster Presentation Seattle, WA
Role April 2025

- Presented ADMX research findings to **over 25** students & professors in a poster session at an internal research symposium

Skills & Interests

Languages: Python, SQL, R, MATLAB
Technical: COMSOL, Git/GitHub, Bash/Linux, Tableau
Language: Fluent in Spanish
Laboratory: Electrical Engineering principles, oscillscopes, multimeters, function generators
Microsoft Office: Experienced in Word, Excel, and PowerPoint
Interests: Drums, Spikeball, Chess, Sudoku