Space Sensor Development Intern – Fall 2025 / Spring 2026

Overview

Engage in sensor R&D for spaceborne payloads and lunar robotics. Work under sensor engineers to advance calibration techniques and data‑processing algorithms.

Key Responsibilities

- Assist in designing and building optical/infrared sensor calibration fixtures; perform radiometric and spectral characterization.

- Write and execute data‑acquisition scripts (Python/Matlab); preprocess raw sensor data and compute performance metrics (SNR, dynamic range).

- Integrate sensors into test rigs: collaborate on mechanical mounts, thermal interface design, and vacuum‑chamber testing protocols.

- Conduct trade‑studies: compare sensor candidates (mass, power, resolution) and document findings in technical memos.

- Support preparation of quarterly deliverable reports for NASA SBIR/STTR milestones.

Required Qualifications

- Enrolled in Electrical Engineering, Physics, Optical Engineering, or related program.

- Basic experience with optical bench setups, photodiode/CCD characterization, or thermal‑vacuum testing.

- Proficiency in Python or Matlab for data analysis.

- Strong written communication; clear technical documentation skills.

Preferred Qualifications

- Familiarity with hyperspectral imaging principles or radiometric calibration standards.

- Prior experience with space‑qualified sensors or knowledge of radiation shielding techniques.

Duration & Compensation

- Full time (35-40hr/week) from August 25 to December 15, 2025 (Fall) or January 15 to May 1, 2026 (Spring).

- Potential continuation into Summer 2026.