

NEON Airborne Observatory Platform Internship Position Description

Intern Duties: *This section describes the primary work to be performed, listing duties starting with those taking the greatest percent of time.*

Airborne Observatory Platform project:

Participate in the activities of the Airborne Observatory Platform (AOP) following the guidance of the NEON AOP mentor. Work will involve the collection, processing and analysis of field spectrometer data in support of airborne operations in NEON Domain 3 and Domain 12. The selected intern will also have exposure to airborne collection and be involved in other ground support activities.

Reports and Presentations:

- Help prepare technical documentation on the data collected during deployments and subsequent processing (collection procedure, algorithm development, data analysis)
- Present project status to NEON science team and peers for feedback periodically throughout the summer.
- Present final scientific poster to NEON science team and peers at final Intern Poster Session at end of the summer program.

Seminars and Departmental Meetings:

Participate in technical and career seminars and meetings with NEON science staff, NEON Internship program staff, and peers.

Community and professional behavior:

Interns are part of a diverse community of peers working and living together. Interns are expected to contribute positively to the community and to conduct themselves in a manner appropriate to a professional environment. Interns are also expected to fully participate during normal office hours and during NEON Internship functions.

Education and Experience:

Currently enrolled in an undergraduate engineering, physics, computer science, or environmental studies (or related) program and at least one semester of calculus. Must have at least one advanced lab course in area of study, and exposure to data processing tools (e.g., Excel, R). Must have at least one semester of college remaining after the summer program.

Desired (but not required)

The ideal candidate will have completed the equivalent of two years of college and have exposure to fieldwork. The ideal candidate will also have experience with remote sensing image data such as Landsat or MODIS data, as well as exposure to software coding and computational algorithm development in numerical analysis languages (e.g., IDL, MATLAB).

Knowledge/Skills/Abilities:

- Ability and willingness to learn and use data collection instrumentation in the field and in the lab.
- Ability and willingness to learn and use appropriate data analysis software (e.g., ENVI)
- Ability to work with a diverse group of peers.
- Skill in the use of software for communication purposes (e.g., Word, PowerPoint, Excel).
- Basic problem solving skills.
- Good oral and written communication skills.
- Potential to excel in science career.
- Ability to work full-time in Boulder, CO and travel to NEON sites in Florida and Wyoming during the summer program.
- Ability to interact with mentors and peers in a manner that supports collaboration and inquiry.
- Ability and willingness to work within guidelines and policies of the organization and assigned work groups.
- Ability and willingness to work in a typical office environment
- Ability to conduct basic field work activities, including standing, sitting, or crouching in one position for extended periods of time, hiking (including in somewhat steep terrain and in challenging vegetation) up to 3 miles at a time, and carrying up to 30 lbs of equipment in the field.

Other requirements:

United States citizen or permanent authorization for U.S. employment.

Decision making and problem solving – i.e., types of problems that are solved independently

Interns will use basic problem solving skills in their work, will exercise judgment regarding when to ask for help, and will consult with their supervisor or mentor on larger job or community related issues.

NEON Inc. is an Equal Opportunity Employer. Women, Minorities, Veterans and Disabled Persons are encouraged to apply.