

Night Sky Monitoring Internship Position

The City of Fort Collins (City) operates a network of night sky quality monitoring stations to measure nighttime sky brightness via data loggers and cameras. The primary goal of this network is to document existing sky quality conditions within the City and its Natural Areas and establish a baseline metric of sky brightness to help inform management decisions. Monitoring stations are located throughout the City including two Natural Areas. Stations are equipped with either autonomous semi-permanent installations using cellular data connections requiring minimal maintenance, or temporary data loggers requiring periodic manual data downloads and battery changeout. The City is seeking a highly motivated intern to manage and maintain this network. This intern position will be responsible for site visits to perform basic maintenance (the scope of this function may change due to current COVID-19 restrictions), data transfer from temporary monitoring stations to an online database, performing basic QA/QC of dataset(s) using standardized methods, generating descriptive data summaries for all stations, managing a data reporting web page, and reporting and presenting data in a summarized format to the City's Night Sky Team. The intern will be employed by Air Resources Specialists, Inc. (ARS) of Fort Collins, and will work with engineers and technicians from ARS, a consultant to the City, as well as members of the City's Night Sky Team, including a representative from the National Park Service's Natural Sounds and Night Skies Division.

*This position is non-essential and will not require physical presence in an office, thus can be successfully performed while complying with current state Safer-at-home orders.

This will be a paid position, \$15/hr, approximately 8-10 hours per week (flexible), for up to 8 months, depending on budget. Start date mid to late April.

Required Skills:

- Proficient with Microsoft office products including Excel and Word
- Experience with scientific data collection in a field setting
- Ability to work independently and as part of a collaborative team
- Must be able to follow established safety protocol while working in remote settings, accessing rooftops, and or in tight or confined spaces.
- Must have a valid driver's license

Preferred Skills:

- Experience working with large datasets
- Strong organizational skills with attention to detail

- The ability to present and communicate scientific findings to general public and scientific audiences.
- Strong mathematical skills including an understanding of logarithmic and exponential functions
- Basic statistical knowledge with the ability to produce descriptive statistics and basic statistical analysis
- Scripting experience with R or Python
- Experience with image handling and image processing software such as Adobe Photoshop or similar
- Enthusiastic about natural resource protection including night sky resources
- The ideal candidate would take the initiative to use these data for further statistical analysis and potentially for an undergraduate thesis

To Apply:

To apply to this position please email a resume and cover letter describing your interest to:

Jeremy_M_White@nps.gov

Application deadline is Monday May 25, 2020