



COLORADO FOREST
RESTORATION INSTITUTE



COLORADO STATE UNIVERSITY

Position title: Assistant Program Manager, Spatial Analyst

Location: Fort Collins, Colorado

Nature of Appointment: This is a full-time, salaried, Administrative Professional Research Associate III position, 12-month, annually renewable with continuation contingent upon satisfactory performance and availability of funds.

Preferred Start Date: September 1st, 2019.

Salary and Benefits: \$50,000 to \$52,000.

Positions include an attractive benefits package including health care coverage through Colorado State University and paid sick leave. For a full list of benefits visit the CSU Human Resources Benefits website: <http://www.hrs.colostate.edu/benefits/>

To Apply: To ensure full consideration, applications must be received by 11:59pm (MT) on June 21st, 2019. Please submit all application materials online at <https://jobs.colostate.edu/postings/67429> Required documents to apply: Statement of Interest, Resume, and contact information for three references. References will not be contacted without prior notification of candidates.

Position Summary: This Research Associate II position is specifically tasked with contributing to a program of work that advances collaborative forest restoration, natural resource planning, wildfire risk mitigation, and watershed health-related decision-making in Colorado and the Interior West with spatial data production, management, analysis, and communication. The incumbent will be responsible for spatial data production using remote sensing and field-based technologies (GPS), spatial data management, spatial analysis to support science and planning initiatives, and written and oral communication of spatial data and results of spatial analyses to diverse audiences. The Colorado Forest Restoration Institute is involved in multiple initiatives that require spatial data analysis and modeling to assess current conditions (e.g. wildfire risk, forest composition and structure, watershed health/erosion modeling) and to prioritize forest restoration and fuels reduction activities across large landscapes. These initiatives are often collaborative in nature so the incumbent should have a general knowledge of western US forest ecology and forestry issues. The spatial analyst is expected to contribute to collaborative planning efforts and the publication of peer-reviewed journal papers and non-technical products for diverse audiences.



Required Qualifications:

- M.S. degree in forestry, ecology, natural resource, geography, or a related field of study.
- Proficiency in producing, managing, analyzing, and communicating spatial data.
- Proficiency in spatial analysis using ESRI GIS software.
- Must have a valid driver's license or the ability to obtain a driver's license or access to a licensed driver by the employment start date.

Preferred Qualifications:

- High level of computer competency and ability to work with diverse ecological data (spreadsheets, databases, raster and vector spatial data).
- Experience automating spatial analysis workflows with remote sensing, multiple data types, big data, or spatial analysis across multiple software platforms. Programming experience, such as Python and R to automate spatial data processing and analysis, is preferred.
- Knowledge of western US fire ecology and management (e.g. monitoring fire effects or modeling fire behavior)
- Knowledge of watershed science (e.g. hydrology or geomorphology)
- Familiarity with and ability to interpret field based sampling methods and protocols for forestry monitoring and research and/or watershed science.
- Demonstrated ability to communicate effectively across cultural boundaries and work harmoniously with diverse groups of students, faculty, staff, and stakeholders outside the university setting.

Job Duty Responsibilities:**Program and Project Development (25%):**

- Contribute to CFRI data analysis and risk assessment program and project development by initiating ideas, communicating with CFRI team members to refine ideas, and contributing to internal CFRI strategic and operational action plans.
- Establish and maintain communication with project partners to identify project goals, tasks, and deliverables, timeframe for completion, and estimated budget for carrying out project tasks and completion of deliverables, including estimates for personnel, travel, materials & supplies, and services.
- Contribute to internal Colorado Forest Restoration Institute organization, coordination, and communication to align personnel, resources, and activities to meet strategic and operational action plan goals, tasks, and deliverables.

Program and Project Management (50%):

- Apply technical expertise as appropriate to carry out and complete tasks in coordination and collaboration with other CFRI staff to produce, analyze, and communicate results of spatial data analysis.

- Evaluate and communicate knowledge from CFRI ecological monitoring and research programs through oral presentations to project partners and professional audiences, and through written products, such as refereed journal article submissions, technical reports, project briefing papers, and popular media.
- Develop and ensure timely implementation of work plans specifying tasks and timelines for completion towards project deliverables.
- Identify “critical path” of tasks that require other CFRI staff contributions, and communicate with them about timeframes for completion.
- Conduct necessary travel to field sites to carry out project tasks.
- Hire, train, and supervise assistants to conduct tasks and produce products contributing towards project deliverables.
- Submit expenses to WCNR Business Office in a timely manner.

Applied Research (25%)

- Contribute to methodological approaches for addressing research or monitoring questions, including data sources, sampling strategy, and logistical strategies for deploying collecting data.
- Contribute to the interpretation and implications of results vis-à-vis applied contexts and/or broader scientific knowledge.
- Develop and disseminate technical reports and analytical products for use by project partners
- Contribute to the production and submission of manuscripts for peer-review publication
- Contribute to the generation of research questions associated with landscape ecology, forest development, and post disturbance forest trajectories in forest restoration and wildfire mitigation contexts; solicit feedback on research questions from subject matter experts within and external to the university.

About the Colorado Forest Restoration Institute: The Colorado Forest Restoration Institution (CFRI) is a Congressionally-authorized program within the Department of Forest & Rangeland Stewardship at Colorado State University with the mission to develop, compile, synthesize, and apply locally-relevant science-based knowledge to achieve forest restoration and wildfire mitigation goals. The geographic focus of the Institute is the State of Colorado, the U.S. Southwest, and the U.S. Intermountain West. Visit the CFRI website for more info about our mission and work. <https://cfri.colostate.edu>

About the Department of Forest & Rangeland Stewardship: The Department of Forest and Rangeland Stewardship at Colorado State University is interdisciplinary with programs of emphasis in forestry, fire science, fire management, natural resource policy/planning, rangeland ecology, and restoration ecology. The Department’s faculty and staff support the Warner College of Natural Resources (WCNR) and the University in fulfilling the Land Grant Mission in these programmatic areas. The Department offers undergraduate majors in Forestry, Rangeland Ecology, and Natural Resources Management in addition to Master of Science and Doctor of Philosophy degrees, and a Master in Natural Resource Stewardship degree. The Warner College is home to five academic departments and several centers and institutes such

as the Colorado Forest Restoration Institute, the WESTFIRE Research Center, the Colorado State Forest Service, Natural Resource Ecology Lab, the Center for Environmental Management of Military Lands and the Colorado Natural Heritage Program. These programs, institutes and centers provide a foundation for research, education and outreach in this field.

EEO Statement: Colorado State University is committed to providing an environment that is free from discrimination and harassment based on race, age, creed, color, religion, national origin or ancestry, sex, gender, disability, veteran status, genetic information, sexual orientation, gender identity or expression, or pregnancy and will not discharge or in any other manner discriminate against employees or applicants because they have inquired about, discussed, or disclosed their own pay or the pay of another employee or applicant. Colorado State University is an equal opportunity/equal access/affirmative action employer fully committed to achieving a diverse workforce and complies with all Federal and Colorado State laws, regulations, and executive orders regarding non-discrimination and affirmative action. The Office of Equal Opportunity is located in 101 Student Services.

Background Check Policy Statement: Colorado State University (CSU) strives to provide a safe study, work, and living environment for its faculty, staff, volunteers and students. To support this environment and comply with applicable laws and regulations, CSU conducts background checks. The type of background check conducted varies by position and can include, but is not limited to, criminal (felony and misdemeanor) history, sex offender registry, motor vehicle history, financial history, and/or education verification. Background checks will be conducted when required by law or contract and when, in the discretion of the university, it is reasonable and prudent to do so.



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