POSITION ANNOUNCEMENT: Data Engineer

Conservation Science Partners (CSP; csp-inc.org) is seeking a Data Engineer to support the technical work of 25+ creative conservation biologists, ecologists, and social scientists implementing 50+ science-driven projects across the U.S. and internationally.

Conservation Science Partners is a leader in the fields of conservation biology and landscape ecology, working at the intersection of the latest computational technologies and the environmental sciences. We seek a Data Engineer to provide project-specific support, as well as leadership, on a wide array of high-profile, data-driven projects or initiatives. We work in the exciting, complex, and fast-paced non-profit realm where the emphasis of projects is generally on terrestrial ecology and freshwater systems, with applications to human systems (e.g., land and water use, protected areas, social and environmental justice, end-user needs) using tools that include: data science and advanced analytics; disturbance, drought, impacts, or risk analysis; climate change vulnerability analyses; species occupancy and habitat modeling; and wildlife and ecological connectivity analysis, among others. The position will serve as part of a team of data scientists and ecologists working to solve large-scale problems through implementation of end-to-end software development workflows, machine learning/advanced statistical modeling, and cloud based computing tools. This individual will work closely with teams based in two offices (CA and CO) plus affiliated locations or institutions in four other western states. The successful candidate will contribute to an internal culture of diversity, equity, inclusion, innovation, creativity, and experimentation, and help to advance the function, direction, and initiatives of the organization.

Core responsibilities for this position include:

- Designing and implementing data processing and ingestion pipelines using a portable reproducible science workflow that includes using version control workflows (git), containerized environments (docker), and utilizing cloud based computational resources (e.g. Azure, Amazon Web Services, and/or Google Cloud Platform).
- Engineering of features from a variety of data types (e.g. imagery, video, tabular, etc.) for training, validation, and testing datasets.
- Designing and implementing supervised/unsupervised machine learning, deep learning (Tensorflow, Keras, and/or PyTorch), and Bayesian statistical models (Stan, JAGS, and/or greta).
- Contributing to the design, development, and management of multiple research initiatives or projects simultaneously; liaising directly with diverse project partners or clients, as needed.
- Developing or supporting manuscripts, reports, proposals, professional presentations, and science communication tools.
- Helping to promote a culture of diversity, creativity, innovation, and experimentation in CSP.

Preferred qualifications or skills: Fluency in SQL, JavaScript, html, CSS, Markdown, and LaTeX; ability to provision and optimize large computational loads using cluster, GPU, and distributed computing platforms; familiarity with continuous integration/deployment and implementation of these concepts into end products; and knowledge of software and workflows to prepare data and spatial data for dashboards serving on the web.
Required qualifications: MSc or PhD in conservation biology, ecology, computer science, or a related field. Candidates with a bachelor’s degree plus professional certification(s) or experience substantially exceeding the required minimum may be considered.

- High proficiency programming in Python and R.
- Applied experience with supervised/unsupervised image classification and segmentation.
- Experience with GIS tools (e.g. Google Earth Engine, Mapbox, CARTO, QGIS, ArcGIS).
- Proficiency working in a Unix based environment and shell-scripting.

Application deadline and expected start date: Priority will be given to complete applications received by August 31, 2020, with screening to begin soon thereafter; interviews in early September, and an ideal start date by early October 2020.

Location: This position is intended to be based in Truckee, CA. Due to the ongoing, fluid situation with the risks of COVID-19 transmission, and CSP’s interest in reducing such risks, we will consider a remotely stationed individual. Ideally, if and when the risks are sufficiently reduced, and if the candidate and CSP staff are comfortable, we would like to revisit the location of this position. Truckee is 30 minutes from Reno, NV. The Reno-Truckee area offers a high quality of life near natural beauty, a vibrant evolving urban area, outdoor recreation, excellent educational institutions, and a convenient international airport.

Compensation: We offer competitive salaries commensurate with experience. We also offer a comprehensive group medical, dental, and vision insurance package; retirement benefits; and professional growth and advancement opportunities.

How to apply: Please prepare a cover letter explaining how your goals, skills, and experience fit the core responsibilities of the role. Please also describe how your broader knowledges and experiences can contribute to our organizational culture and values. In addition, please provide the names and contact information of at least three relevant professional references, as well as your CV, and send to hiring@csp-inc.org. Please indicate DATA ENGINEER in the subject line. Your cover letter, reference list, and CV should be compiled and emailed as a single PDF file. We sincerely appreciate all those expressing interest in this position. However, only applicants invited for an interview will be contacted.

About Conservation Science Partners: CSP is a 501(c)(3) nonprofit scientific collective established to meet the analytical and research needs of diverse partners in conservation projects. Our mission is to apply human ingenuity to the preservation of species, populations, and ecosystems using scientific principles, innovative approaches, and lasting partnerships with conservation practitioners. Our principal offices are located in Truckee, CA, and Fort Collins, CO, with additional staff located in four other western states.

Organizational Values and Culture: Our core values include scientific and technical excellence and integrity, and we consider diversity, equity, and inclusion as equally important values for our employees to possess or be open to learning and growing. We support and encourage creativity and innovation in practice and products; respectful co-production of knowledge; engagement with social justice practices; and connection to the living world. CSP supports vibrant, diverse living systems of all kinds, remaining
mindful of the root causes of ecological harm. In particular, we are committed to realizing diversity, equity, and inclusion in all we do. We are actively pursuing projects that directly involve Black, Indigenous, and communities of color and diverse international partners, address disparate impacts of environmental change, and support social justice. We are advancing a process to ensure that such goals come alive, recognizing the sustained attention, learning, and long-term commitment that this requires.

CSP’s culture stems from highly skilled, independent people working in dynamic collaboration to implement quality projects while imagining the future shape, form, and landscape of conservation partnerships. Our staff includes artists, musicians, athletes, collectors, mechanics, and people pursuing other passions beyond conservation. As a group, we are candid and embrace respectful communication, intellectual independence, intentional collaboration across a dispersed network, personal accountability, ownership of quality and joy in our work, and adaptability and resilience. We put a special emphasis on innovation and creative co-leadership. Through staff workshops and retreats, collaborative ‘Innovation Labs,’ cross-sector outreach and training, and staff-driven technical and facilitative approaches, we seek ways to increase our creativity, efficiency, and effectiveness, while enjoying the process.

CSP is an equal opportunity employer and does not discriminate on the basis of race, color, national origin, sex, disability, age, religion, sexual orientation, gender identity, gender expression, creed, veteran status, parental status, or marital status in its programs and activities. We recognize that diverse backgrounds, cultures, and experiences can only enrich our community and our conservation mission and goals. As part of our intentional efforts to increase inclusivity, equity, diversity, and justice, we encourage applicants from underrepresented groups in conservation, e.g., those who identify as women or non-binary, LGBTQ+, are people of color, or represent any combination of these and other identities.