Predictive Modeler

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Type: Full-Time
Salary: $65,000 - $70,000 per year
Posted: 11 days ago
Category: Laboratory and Research

Colorado State University

Job Description
Position Summary:

We are looking for a highly skilled research associate (RA) to work at the cutting edge of mitigating avian collisions with anthropogenic structures. The objective of the work is to provide risk assessment tools for guiding aviation managers in protecting public safety. The RA will collate data and develop predictive models to estimate bird strike probability with civil and military flights. This work will be further developed into interactive visualizations that airport managers will use to manage risk of bird collisions, protecting both avian populations and human safety. The predictive models could also be applied more broadly to decrease rates of avian mortality caused by collisions with other anthropogenic structures (e.g., buildings, wind turbines).

The RA will work at the forefront of human-wildlife interactions with quantitative ecologists and wildlife biologists from USDA-APHIS and Colorado State University (CSU) as well as aviation stakeholders, natural resource economists, and specialists with other backgrounds. They will also work closely with a data scientist to transfer their modeling workflows into a pipeline and dashboard system for real-time risk assessment. The position is co-located at CSU and the National Wildlife Research Center of USDA-APHIS-Wildlife Services in Fort Collins, CO (in-person work is preferred but remote work may be allowed under some conditions).

Essential Job Duties:

Data Management, Analysis, and Inference

Work with a data scientist on data management and data analysis, but be the primary person responsible for data analysis and scientific inference in collaboration with other project members.

Publication in Peer-Reviewed Literature

Summarize research inference into writing for reports and peer-reviewed journal articles.

Interaction with Stakeholders

Participate actively in video and in-person meeting with stakeholders from USDA, the DOD, and the FAA.

Mentoring and Career Development

Hold mentoring discussions with project PI's, and also help mentor junior members of the PI labs.

Conditions of Employment:

- Pre-employment Criminal Background Check (required for all new hires)
- Must be authorized to work in the U.S. by position start date.

Supervision:
NA

Minimum Education:

Master's Degree

Minimum Experience:

- Applicants must have defended their M.S. or Ph.D. in quantitative ecology, wildlife biology, computer science, data science, engineering, statistics or related fields.
- Experience and record of publishing in peer-reviewed journals using statistics or other forms of data-driven modeling.

Preferred Experience:

- Experience using artificial intelligence/machine learning models, hierarchical statistical models, dynamic spatio-temporal models, and developing pipelines for large datasets.
- Experience with probabilistic forecasting.
- Experience with optimization and decision analysis.
- Experience working with applied stakeholders.

Salary Range
$65,000 - $70,000
Required Application Documents

To apply, please upload the following applicant documents. Ensure your materials fully address the required and preferred job qualifications of the position. Please note, applicants may redact information from their application materials that identifies their age, date of birth, or dates of attendance at or graduation from an educational institution.
Cover Letter, Resume/CV
Employee Benefits

Colorado State University is not just a workplace; it's a thriving community that's transforming lives and improving the human condition through world-class teaching, research, and service. With a robust benefits package, collaborative atmosphere, and focus on work-life balance, CSU is where you can thrive, grow, and make a lasting impact.

- Review our detailed benefits information here.
- Explore the additional perks of working at CSU here.
- For the total value of CSU benefits in addition to wages, use our compensation calculator.
- Lastly, click here for more information about why Fort Collins is consistently ranked in the top cities to live in!

Background Check Policy Statement
Colorado State University 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 for the finalist before a final offer. The type of background check conducted varies by position and can include, but is not limited to, criminal history, sex offender registry, motor vehicle history, financial history, and/or education verification. Background checks will also be conducted when required by law or contract and when, in the discretion of the University, it is reasonable and prudent to do so.

EEO

Colorado State University (CSU) provides equal employment opportunities to all applicants for employment and prohibits discrimination and harassment of any type without regard to race, color, religion, age, sex, national origin, disability status, genetics, protected veteran status, sexual orientation, gender identity or expression, or any other characteristic protected by federal, state or local laws.