Postdoctoral Researcher-Arctic

Falmouth, Massachusetts

SUMMARY: Woodwell Climate Research Center (Woodwell) is a leading independent climate research institute, with a mission to advance science-based climate policies through scientific research and outreach. The keys to Woodwell’s success are the quality of its research and the ability to deliver that science to policymakers and decision makers.

We seek a postdoctoral researcher to map landscape changes in the Arctic caused by abrupt permafrost thaw. The postdoctoral researcher will lead development of a deep learning model to identify and map retrogressive thaw slumps at high spatial resolution across key regions of the Arctic. The successful candidate will have opportunities to work closely with a team of scientists at the Woodwell Climate Research Center and collaborating institutions on related projects, including the impacts of permafrost thaw on carbon budgets, climate policy, and Arctic communities.

Responsibilities:
Efficiently process high-resolution remote sensing data products from multiple sources/platforms in a high-performance computing environment.
Lead the development of a new approach to generate maps of landscape disturbance following abrupt permafrost (i.e., retrogressive thaw slumps) in the Siberian Arctic.
Work closely with a team of Arctic researchers to understand and communicate the implications of permafrost thaw on Arctic residents and global climate.
Lead manuscript preparation and publication.
Present results at relevant conferences and meetings.

Qualifications and Experience:
Ph.D. (granted or expected soon) in Computer Science, Ecology, Earth System Science, Data Science, Remote Sensing, or a related discipline.
Data science skills including proficiency handling large data sets and applying AI/machine learning algorithms.
Experience with cloud-computing preferred, including software as a services (SAS) products such as Google Earth Engine. An advanced level of experience with high-level coding environments such as R or Python.
Experience with, or eagerness to learn, the TensorFlow software library for machine learning.
Excellent interpersonal, teamwork, written, and verbal communication skills.
Demonstrated record of publication in scientific journals.
Ability to lead a research project and independently develop new directions.
Interest in Arctic system science.
Ability to work as a member of an established collaborative team and lead a regular discussion of project goals, objectives, and task list.

Application review will begin on September 20, 2021, applications will be accepted after this date.

Desired Start Date: November 1, 2021
Classification and Compensation: This is a full-time, salaried, exempt position. The salary range is $65,000-68,000. This is a two-year fixed-term appointment with the potential to extend. Woodwell offers a generous benefits package and work life balance.

Location: Falmouth, Massachusetts.

Application Instructions: To apply, please send your cover letter addressing your experience and qualifications in relation to the responsibilities of this position, curriculum vitae, and contact information for three references as a single PDF to our careers portal found here. Incomplete applications will not be reviewed. Please type Postdoctoral Researcher-Arctic on all correspondence.

Located on a 10-acre campus near the village of Woods Hole, Woodwell Climate Research Center is a private, non-profit research center. Woodwell is a leading source of climate science that drives the urgent action needed to solve climate change. Woodwell has 70+ staff members, and is excited to welcome new employees to this work.

Woodwell is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, mental, or physical disability, age, sexual orientation, gender identity, national origin, familial status, veteran status, or genetic information. Woodwell is committed to providing access, equal opportunity, and reasonable accommodation for all individuals in employment practices, services, programs, and activities.

Diversity, Equity and Inclusion at Woodwell

WE NEED ALL VOICES IN THE FIGHT AGAINST CLIMATE CHANGE

Climate change is the greatest challenge of our lifetimes. Woodwell Climate Research Center (Woodwell) understands that the climate crisis is inextricably linked with persistent social injustice. Effectively addressing either requires addressing both. The climate crisis demands that we bring to bear all of the knowledge, expertise, innovation, and creativity that we can collectively muster, and those who have been marginalized and disproportionately impacted must be heard.

The work Woodwell does is stronger when shaped by a diversity of knowledge, perspectives, and experiences. We strive to welcome, respect, and amplify differing voices. We value individuals as they are, with all their differences in race, age, ethnicity, gender identity, sexual orientation, religious beliefs, language, and mental and physical abilities.

Woodwell acknowledges that our organization, and the scientific community more broadly, have a long way to go in living up to these ideals. We approach the work of improving our organization with the same ambition and commitment to systemic change that we bring to addressing climate change.

We will inevitably make mistakes, but we will continue to listen, learn, and do this critical work. We understand that this work requires an ongoing commitment from each and every one of us. We are actively engaged in building and sustaining an equitable and inclusive culture within our organization, and in fostering greater diversity in climate science.