Postdoctoral Research Associate

Uncertainty Characterization for the Global Change Intersectoral Modeling System (GCIMS)

The Civil and Environmental Engineering Department (CEE) at Tufts University invites applications for a Postdoctoral Research Associate position focusing on uncertainty quantification and scenario development for multi-sector systems under the supervision of Dr. Jonathan Lamontagne. The successful candidate will join a large transdisciplinary team spread across several universities and national labs, contributing to the Global Change Intersectoral Modeling System (GCIMS) Scientific Focus Area (SFA), led by the Pacific Northwest National Lab, and sponsored by the U.S. Department of Energy.

Background:

Many of the most compelling scientific challenges of the 21st century lay at the intersection of land, energy, water, climate, and socioeconomic systems that interact at regional to global scales. Uncertainty is a key feature of such multi-sector integrated systems, that experience both changing external forcing and complex internal dynamics. Additional uncertainties arise from the use of different models and the nature of their coupling. This project aims to understand and characterize how uncertainty propagates across sectoral boundaries, and over temporal and spatial scales.

As part of a large and diverse research team, the Postdoctoral scholar will advance and deploy a global multi-sector modeling framework in a series of computational experiments to identify how influences from different sectors compound to impact the coevolution of energy, water, land, climate, and socioeconomic systems.

More on GCIMS:

https://gcims.pnnl.gov/global-change-intersectoral-modeling-system

Required Qualifications:

The ideal candidate will have a strong background in a relevant discipline such as computer science, applied mathematics, statistics, civil and environmental engineering, geosciences, or operations research. Strong preference will be given to candidates with a strong computational background. A Ph.D. in a relevant field is required by the start date.

To Apply:

To apply for this position, please send a curriculum vitae, cover letter, and contact information for three professional references as a single PDF to Dr. Jonathan Lamontagne (jonathan.lamontagne@tufts.edu). The cover letter should describe the applicant’s interest in the position and highlight relevant qualifications and experience.

The review of applications will begin immediately, and the position will remain open until filled. Funding for this position is in place for three years. Questions regarding the position should be directed to Dr. Lamontagne.