Postdoctoral Scholar in Spaceborne LiDAR Remote Sensing for Mountain SWE Mapping

The Cryosphere Interactions and Geospatial Hydrology Team (CryoSIGHT) in the College of Earth, Ocean, and Atmospheric Sciences (CEOAS) at Oregon State University (OSU) invites applications for a postdoctoral position to advance mapping snow depth and snow water equivalent (SWE) in mid-latitude mountain watersheds with spaceborne LiDAR instruments (ICESat-2, GEDI). We are looking for a highly motivated scholar with strong analytical skills and a passion for advancing snow hydrology research through satellite remote sensing. The successful candidate will work on a NASA-funded project, and collaborate with other researchers in CryoSIGHT (https://cryosight.org/) and the Terrestrial Hydrology Research Group at the University of Colorado (http://geode.colorado.edu/~small/).

Responsibilities:
- Apply, assess, and refine snow depth retrievals from spaceborne LiDAR instruments.
- Develop and evaluate methods for generating spatially-temporally continuous snow data based on sparse sampling of snow depth.
- Lead communication of research via peer reviewed publications and conference presentations.
- Contribute productively to research group culture and mentor grad/undergrad students.

Required Qualifications:
- Ph.D. in hydrology, physical geography, Earth/environmental sciences, engineering, atmospheric science, computer science, or a related field, completed less than 4 years from the start date.
- Expertise with remote sensing for hydrology, the cryosphere, or related Earth systems.
- Proficiency in computer programming (e.g., Python, Matlab, R, etc.).
- A strong record of independent and productive research, as evidenced by publications in high quality peer-reviewed journals and conference presentations.
- Excellent oral and written communication skills.

Preferred Qualifications:
- Expertise with processing and analyzing data from spaceborne LiDAR (e.g., ICESat-2, GEDI).
- Experience with machine learning, snow modeling, and/or data assimilation.

Position Details:
- **Start Date:** Negotiable but July 1 – September 1 is preferred.
- **Duration:** Up to two years, subject to performance and continued funding availability.
- **Starting Stipend:** $62,000-$66,000 annually (plus benefits), depending on experience.
- **Location:** OSU is a beautiful, historic and state-of-the-art campus located in Corvallis, a college town within the scenic Willamette Valley about 90 minutes south of the Portland metro area. Centrally located, Corvallis has access to the Pacific Coast, Cascade mountains, rivers, forests, wine country, and more! On-campus work is preferred, but hybrid/remote work is negotiable.

Application Process:
To apply, please submit the following materials at the link below: (1) a brief cover letter (1-2 pages) highlighting how your background, skills, and career align with the position; (2) your current CV/resume; (3) contact information for 3 academic references; (4) and one or two sample publications.
https://forms.gle/4Px3LNtd6dhjKKHD7

Application review will begin on April 28, 2025 and will continue until the position has been filled. For questions about the position, please contact Dr. Mark Raleigh (raleigma@oregonstate.edu).