



College of Earth, Ocean, and Atmospheric Sciences

Oregon State University

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Position Announcement Posting 0013318

ASSISTANT PROFESSOR

Geospatial Analytics, Climate Change Adaptation, and Coastal Processes

Position: The College of Earth, Ocean, and Atmospheric Sciences at Oregon State University (OSU) located in Corvallis, Oregon, invites applications for a full-time 1.00 FTE 9-month, or part-time 0.75 FTE 12-month, tenure-track Assistant Professor position to contribute to OSU's Provost Initiative in Marine Studies. The position is anticipated to begin in September, 2015.

Climate change is a salient security concern for the United States and globally, with coastal areas of the world particularly vulnerable due to rising sea levels, increasingly powerful storms, and growing populations within the sea's reach. Geospatial Analytics & Planning is the development and use of large geospatial/temporal datasets to help inform effective decision-making, particularly in regard to adaptability to environmental change. Research is needed to characterize vulnerability and adaptive capacity to climate change as related to security and coastal processes, and specifically to assess vulnerability with respect to infrastructure, economic sectors, geographic areas, population groups, and ecosystems. Two challenges are to: (1) Improve data, methods, and scenarios for research on vulnerability and resilience of human and natural systems, and (2) Identify climate thresholds in vulnerable coastal systems. The successful candidate unites expertise in geospatial analysis, physical aspects of climate systems, and a specialization in social science approaches to adaptation, vulnerability, and planning for climate change and coastal processes.

The Marine Studies Initiative (MSI) will be a transformative approach to the study of marine systems, incorporating both the natural and human environment, and covering "ridge to ridge" (from the mountains to the mid-ocean ridge). It will focus on linking the natural and social sciences of marine systems, use these bridges to build new collaborative approaches to policy and decision-making, and develop and incorporate data-intensive methods in research and education. The initiative will build on the existing strengths in marine sciences, geospatial science, environmental economics, and public policy at Oregon State University. The MSI will encompass both research and education, building new programs at the undergraduate, graduate, and post-graduate levels.

This Assistant Professor unites expertise in geospatial analysis, physical aspects of climate systems, and a specialization in social science approaches to adaptation, vulnerability, and planning for climate change and coastal processes. The candidate will conduct research, teaching, and outreach to improve data, methods, and scenarios of vulnerability and resilience, and identify thresholds of human and natural systems to climate change. Consistent with the OSU strategic plan and signature areas, this position will educate OSU students to address multifaceted national and global challenges that resist simple technical or social solutions, and that affect the environment, the economy, and human health.

Faculty at Oregon State University are committed to undergraduate and graduate student success. We seek faculty who have evidence of educating and mentoring a diverse group of learners, which may include experience with sponsoring student research or internships, developing study abroad opportunities, service learning courses, or the use of innovation pedagogies such as hybrid or online learning.

Position Responsibilities

Teaching and research/outreach-related appointment with an expectation for scholarly accomplishments appropriate to the position focus and responsibilities. The successful candidate will teach undergraduate courses in geospatial science applied to marine systems. S/he will also teach courses serving the Baccalaureate Core and the new Marine Studies Initiative, as well as graduate courses in the College of Earth, Ocean, and Atmospheric Sciences. Research will be interdisciplinary and will incorporate geospatial science approaches to biophysical, ecological and marine system science research and outreach to address critical societal issues. The position will have an academic home in CEOAS, and will work in partnership with the faculty developing the Marine Studies Initiative.

The position includes:

- 40% Research and proposal writing: Establish and maintain a program of research that supports timely promotion in rank, significant contributions to the field, and continued external funding. Work towards distinction in research as evidenced by national recognition. Research activities are expected to result in publications that advance knowledge and understanding. Results of research should be disseminated in peer-reviewed journals, conference proceedings, and books appropriate for the discipline, as well as in presentations at national and international scientific meetings. Put forth a competent and professional effort to obtain external funding for their research programs and those of their students.
- 50% Teaching and advising. Teach undergraduate and graduate courses in concepts and methods of adaptation, vulnerability, and planning for climate change and coastal processes, and in geospatial analytics (e.g., Geographic Information Systems and Science, geospatial programming and modeling, and Responsible GIS practice). Activities also include assisting with student research and internships, mentoring and advising students, and designing curriculum.
- 10% Service to the disciplinary group, the college, and the profession.

Minimum/Required Qualifications:

- Ph.D. by the start of employment in geography or other degree field that supports geospatial analytics and planning.
- A record of significant and innovative research in geospatial approaches to climate change adaptation and coastal processes corresponding to the aforementioned areas of interest.
- A strong scholarly potential demonstrated by a record of peer-reviewed publications and a clearly defined research agenda commensurate with academic rank.
- Demonstrated ability or significant potential for establishing a research program

supported by extramural funding.

- A strong potential for teaching excellence and commitment to student success in the graduate and undergraduate programs of the College of Earth, Ocean, and Atmospheric Sciences.
- A strong potential for mentoring undergraduate and graduate students and post-doctoral fellows as evidenced by commitment to student success.
- Proficiency in oral and written English.
- A commitment to educational equity in a multicultural setting and to advancing the participation of diverse groups and supporting diverse perspectives.

Preferred Qualifications:

- Two years of professional experience.
- Demonstrated record of successful interdisciplinary collaborations.
- Experience in writing proposals and teaching experience at the university level.

To Apply: To access application instructions, go to https://jobs.oregonstate.edu/applicants/jsp/shared/position/JobDetails_css.jsp and for the position announcement, go to <http://ceoas.oregonstate.edu/employment/> For information regarding CEOAS see <http://www.ceoas.oregonstate.edu>

When applying you will be required to attach the following electronic documents:

- 1) Curriculum Vita
- 2) A cover letter of application addressing your qualifications and a statement of vision for the position referring specifically to our qualifications lists.
- 3) Contact information for three current references, including their name, title, address, phone number and e-mail address.(Attach as Other Document)

For additional information regarding this position please contact: Prof. Aaron Wolf by email (wolfa@geo.oregonstate.edu), 541-737-2722.

Closing Date: For full consideration for this position, your application must be received by **January 15, 2015. Search closes on February 16, 2015**

University and Community:

Oregon State University's commitment to student success includes hiring, retaining, and developing diverse faculty to mentor and educate our undergraduate and graduate students from entry through graduation. Our Strategic Plan (<http://oregonstate.edu/leadership/strategicplan/phase3>) articulates the strategies we believe critical to advancing and equalizing student success. As part of this commitment, OSU has established a hiring initiative for 2014-15 that is designed to support these strategies, of which this search is a part.

OSU is one of only two American universities to hold the Land-, Sea-, Sun- and Space-Grant designations and is the only Oregon institution recognized for its "very high research activity" (RU/VH) by the Carnegie Foundation for the Advancement of Teaching. The university is

comprised of 11 academic colleges with strengths in natural resources, Earth dynamics and sustainability, life sciences, entrepreneurship and the arts and sciences. OSU has facilities and/or programs in every county in the state, including 12 regional experiment stations, 41 county extension offices, a branch campus in Bend, a major marine science center in Newport and a range of programs and facilities in Portland. It is Oregon's largest public research university, conducting more than 60 percent of the research funded throughout the state's university system.

The College of Earth, Ocean, and Atmospheric Sciences is internationally recognized as a leader in the study of the Earth as an integrated system. It operates numerous state-of-the-art laboratories and two oceanographic research vessels, the 177-foot ocean-going Oceanus and the Elakha, a 54-foot coastal research vessel. The College has an annual budget of more than \$50 million, with much of the research support coming from the National Science Foundation, National Oceanic and Atmospheric Administration, National Aeronautics and Space Administration and other federal agencies. It has approximately 104 faculty, 220 graduate students and 613 undergraduate students. Graduate programs include Master's and PhD degrees in Ocean, Earth and Atmospheric Sciences; Geology; and Geography and a Master's degree in Marine Resource Management. The college has undergraduate programs in Earth Sciences and Environmental Sciences, with minors in Environmental Geosciences, Environmental Sciences, Geography, Geology, and Oceanography.

OSU is located in Corvallis, a community of 53,000 people situated in the Willamette Valley between Portland and Eugene. Ocean beaches, lakes, rivers, forests, high desert, the rugged Cascade and Coast Ranges and the urban amenities of the Portland metropolitan area are all within a 100-mile drive of Corvallis. Approximately 15,700 undergraduate and 3,400 graduate students are enrolled at OSU, including 2,600 U.S. students of color and 950 international students.

OSU is committed to a culture of civility, respect, and inclusivity. As an Affirmative Action/Equal Opportunity employer, OSU values diversity in our faculty and staff regardless of their self-identity; to that end, we particularly encourage applications from members of historically underrepresented racial/ethnic groups, individuals with disabilities, veterans, women, LGBTQ community members, and others who share our vision of an inclusive community.