



Northeastern

Faculty Positions in Systems and Sensor Engineering for Urban and Coastal Sustainability

2011-2012

As part of a strategic initiative in the area of Urban Coastal Sustainability, Northeastern University seeks multiple faculty candidates for cross-college tenured or tenure-track appointments at the assistant, associate, or full professor level in the Department of Civil and Environmental Engineering, the Marine Science Center, and the Department of Earth and Environmental Science in the area of Urban Coastal Engineering. These positions are part of a series of hires in global change science, coastal ecosystems, and coastal engineering that build on significant and continued growth in these departments and centers. Northeastern's cross-college hiring efforts seek to foster education and research across disciplinary boundaries. The successful candidates will be expected to demonstrate a proven ability to sustain a research program with an emphasis on interdisciplinary and translational research, teach both undergraduate and graduate classes, and be an active, recognized leader in the discipline. We invite applications from individuals who can contribute to one or more areas within *Coastal Systems Engineering* and *Coastal Remote Sensing and Monitoring*, both broadly construed, with demonstrable interest and experience in **Urban and Coastal Sustainability**.

Coastal Systems Engineering: We seek individuals whose research focuses on interdisciplinary engineering solutions, based on theory and experimentation, computational simulations and data-intensive methods, or a combination, as applied to multidisciplinary problems relevant for urban and coastal sustainability. Areas of specific interest include but are not limited to climate change and urbanization in coastal areas, corresponding impacts on natural ecosystems and built infrastructures, strategies that mitigate the impact of sea level rise and invasive species, resource and habitat remediation, mariculture, and harvesting of wave and tidal energy. Researchers working on multidisciplinary themes that cut across areas like climate change, marine biology, infrastructure management and renewal, synthetic biology, and sensor-based systems, are encouraged to apply.

Coastal Remote Sensing and Monitoring: We seek a specialist in remote sensing, sensor development, and/or monitoring that complement existing university strengths in biomimetics, sensors, synthetic biology and acoustic telemetry, and intelligent diagnostics. Candidates developing and applying solutions (e.g., development of autonomous vehicles and other technologies) to facilitate inspection of underwater structures and coastal infrastructure, monitor coastal security and environmental health as well as address the environmental impacts of human activities in coastal waters are encouraged to apply. There is the opportunity for the successful candidate's laboratory to be based at the Marine Science Center in Nahant, Massachusetts.



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Qualifications: A Doctorate degree in civil and/or environmental engineering, marine and/or environmental science, or closely related fields, and an outstanding record of scholarship, teaching, and service commensurate with desired level of appointment.

About Northeastern University: Northeastern University is located in the heart of Boston and benefits from the intellectual and cultural vitality of an urban environment. Northeastern has numerous international partnerships, is a premier experiential education university, and is a National Science Foundation ADVANCE Institutional Transformation site. The Department of Civil and Environmental Engineering leads two major research centers, including the NIST-funded center on Versatile Onboard Traffic Embedded Roaming Sensors (VOTERS) and the NIH-sponsored program Puerto Rico Testsite for Exploring Contamination Threats (PROTECT). The College of Science's Marine Science Center (MSC) is undergoing significant infrastructural improvements and continues to hire faculty whose research and teaching focuses on scientific and engineering solutions to the critical environmental challenges facing urban coastal ecosystems. The MSC is also home to the Three Seas Marine Biology Program, which is dedicated to training the next generation of marine scientists. Faculty enjoy collaboration with the Homeland Security Center of Excellence on Awareness and Localization of Explosive-Related Threats (ALERT), the ONR MURI in Synthetic Biology, the NSF-funded Gordon Center for Subsurface Sensing and Imaging Systems (CenSSIS), the NSF-funded Center for High-Rate Nanomanufacturing (CHN), the newly designed George J. Kostas Research Institute for Homeland Security, and several other research clusters in the College of Engineering, College of Science, Bouvé College of Health Sciences, and the College of Social Science and Humanities.

Equal Employment Opportunity: Northeastern University is an Equal Opportunity, Affirmative Action Educational Institution and Employer, Title IX University. Northeastern particularly welcomes applications from minorities, women and persons with disabilities. Northeastern is an E-Verify Employer.

How to Apply: Visit <http://www.coe.neu.edu/coe/> and click on Faculty Positions as listed within the College of Engineering. Application should include (1) detailed resume, (2) research development statement, (3) teaching statement, (4) copy of one sample journal paper, and (5) list of four references with contact information. Screening of applications begins December 1, 2011. Questions regarding this position should be directed to Prof. Jerome F. Hajjar at coastalengsearch@coe.neu.edu.