Postdoctoral Fellowship in Infrastructure Resilience in Coastal Settings

A postdoctoral researcher is sought for a position in Infrastructure Resilience in Coastal Settings working under the advisement of Dr. Jamie Padgett in the Department of Civil and Environmental Engineering at Rice University. The successful candidate will serve as a postdoctoral fellow in the NIST-funded Center of Excellence (COE) on Risk-Based Community Resilience Planning, conducting research on infrastructure risk and resilience assessment in the face of multiple hazards, and support multi-disciplinary research on community resilience. The postdoc will play an important role in the Center’s Galveston Testbed activities and related research activities along the lines of multi-hazard risk and resilience. The anticipated scope of the work includes modeling the reliability of coastal infrastructure, including transportation infrastructure and its interdependence with other systems, subjected to storm surge and flooding; developing models of recovery; and developing risk informed decision models to support coastal resilience enhancement for current and projected conditions. For further details on the research scope and position expectations please contact Prof. Padgett.

Qualifications: Candidates should have a Ph.D. in Civil Engineering, Coastal Engineering or a related field, and have a good record of research, publications, and strong communication skills. Successful candidates will ideally have a strong background in structural or systems reliability, probabilistic risk assessment with emphasis on hurricanes/surge/flooding, and resilience quantification. Expertise in regional assessment, network analysis and applications of statistical surrogate modeling are preferred. The following experience with software or coding is preferred but not required: LS-DYNA, OpenSees or other finite element software; coding in Matlab and/or python; working knowledge of GIS and Jupyter notebooks. The candidate must have the ability to work independently to achieve project objectives, meet project deadlines and reporting requirements, and help mentor other group members. The candidate also must fulfill an important role in facilitating collaborations with the multi-disciplinary, multi-institutional project team.

Appointment: The appointment is expected be filled as soon as possible with an anticipated latest start date of August 1, 2018. This date may be discussed and adjusted as needed. The duration of the appointment is two years, contingent upon successful performance in year one. The salary and benefits are competitive, and funding is available for the postdoctoral fellow for travel and training purposes.

To Apply: Please contact Prof. Jamie E. Padgett by email at jamie.padgett@rice.edu with the subject heading “Infrastructure Resilience Post-Doc Application” and provide a CV, two sample publications and the contact information of at least two references. Review of applications will begin immediately but is expected to close by June 1. Additional supporting information may be requested upon review.

Additional Information: Additional details on the research group and center with which the Fellow will be affiliated can be found at: http://www.owlnet.rice.edu/~jp7/ (Padgett Research Group) and http://resilience.colostate.edu/ (NIST COE). Information on the Civil and Environmental Department can be found at www.ceve.rice.edu. As one of the largest and most diverse cities in the country, Houston, Texas boasts endless events, festivals, restaurants, cultural and recreational activities, warm weather, low cost of living, and a gateway for travel world-wide.