Postdoctoral Fellow in Storm Surge and Wave modeling, Extreme Events Institute, Florida International University

Position Description
The Extreme Events Institute (EEI) in Florida International University (FIU), Miami has one postdoctoral opening to support storm surge and wave modeling for quantifying the impacts on the built and natural coastal environments. The EEI (eei.fiu.edu) is a multi-disciplinary research and education organization focused on reducing hurricane damage and loss of life through research and more effective mitigation. The EEI collaborates actively with NOAA's National Hurricane Center, co-located on the FIU Campus.

The fellow will be expected to modify existing structured and unstructured storm surge and wave models to conduct storm surge and wave simulations for historical and predicted events along the coasts of U.S. and Caribbean countries, to design the numerical schemes to simulate storm surge inundation, to develop real-time forecast capacity of storm surge models, and to integrate the freshwater flooding and storm surge models. The fellow will also be expected to write technical reports and scientific papers to present research results, and identify opportunities and assists in preparing contracts, proposals and documentation for external funding. The position is renewed on an annual basis, for a minimum of 2 years, based on satisfactory performance. With strong performance, there is potential for advancement.

Basic Qualifications
Candidates should have a doctoral degree from an accredited institution in relevant science or engineering discipline and have an interest in disaster preparedness, resilience, and hazard insurance. Advanced knowledge of numerical modeling is required and experience of storm surge and wave modeling is preferred. A successful candidate will have: (1) a strong quantitative and analytic background, (2) strong programming skills in Fortran or C/C++ and Python or Matlab, and (3) effective communication skills with an ability to work within a multi-disciplinary research team. Experience of distributed memory parallel programing, via the message passing interface (MPI) library and knowledge of GIS is a plus.

How to Apply
Applicants should send a curriculum vitae, cover letter, 1-2 representative publications, and contact information of two references to Dr. Keqi Zhang (zhangk@fiu.edu) and Mrs. Carolyn Robertson (crober@fiu.edu). Review of applications will begin on July 15, 2017 and will continue until the position is filled.

For additional information, contact Keqi Zhang (ph: 305-348-8368) or Carolyn Robertson (ph: 305-348-1607) by email or phone.