Postdoctoral Fellow in Storm Surge and Wave modeling, Sea Level Solutions Center, Florida International University

Position Description

The Sea Level Solutions Center (SLSC) 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 SLSC (slsc.fiu.edu) is a hub for local, regional, national and international research, collaboration, education, communication and outreach and works. The staff of SLSC works closely with the National Science Foundation funded Florida Coastal Everglades program for Long Term Ecological Research, Extreme Events Institute (eei.fiu.edu), and the International Hurricane Research Center (ihrc.fiu.edu) at the Florida International University.

The postdoctoral fellow will be expected to apply and/or 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 and availability of funding.

Basic Qualifications

Candidates should have a doctoral degree from an accredited institution in relevant science or engineering discipline and have an interest in investigating impacts of sea level rise, storm surge and waves on urban and natural systems. 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. Appointments will have a term of one year starting in Fall of 2018 and are renewable contingent upon excellent performance and availability of funding.

How to Apply

Applicants should send a curriculum vitae, cover letter, one representative publications, and contact information of two references to Dr. Jayantha Obeysekera (jobeysek@fiu.edu). Review of applications will begin on August 1, 2018, and will continue until the position is filled.