Postdoctoral Fellowship in Hierarchical Multiscale Spatio-temporal Statistical Modeling for High-Dimensional Official Statistics

As part of the NSF-Census Research Network (NCRN), University of Missouri is engaged in a large-scale, federally funded research program involving crosscutting research in official (survey) statistics and dynamical systems. As a result, the Spatio-Temporal Statistics Node at University of Missouri plans to appoint a postdoctoral fellow to be a key contributor to this research. The appointment will consist of a one-year contract with expectation of renewal for a second year. The position will remain open until filled and can start anytime.

The postdoctoral fellow will develop and implement innovative statistical methodologies intended to improve the analysis of high-dimensional spatio-temporal survey data. Research will mainly focus on development of broadly applicable methodologies in three related areas: (1) multiscale modeling of survey data, (2) spatio-temporal small area estimation, and (3) integrating information from multiple repeated surveys using hierarchical statistical models. The methodology will be applied to high-profile federal datasets, including the American Community Survey, and be used to address a multitude of subject matter questions from social science and public policy.

The NCRN postdoctoral fellow will reside at the University of Missouri (MU) and be mentored by Scott Holan (Associate Professor, MU), Christopher Wikle (Professor, MU) and Noel Cressie (Distinguished Professor, University of Wollongong) and will interact with other researchers in the Department of Statistics at MU, in addition to various researchers from the U.S. Census Bureau.

Applicants must have received, or expect to complete, a doctorate in statistics or related discipline within the last 5 years. Women and members of under-represented groups are particularly encouraged to apply. Selection criteria will include demonstrated research ability in statistics or a relevant scientific discipline, interest in hierarchical spatio-temporal modeling and official statistics, survey data, Bayesian methodology and computation, experience with dimension reduction and analysis of high-dimensional datasets, commitment to collaborative research, and excellent verbal and written communication skills.

The initial salary is $75,000 per year.

The NCRN postdoctoral fellow will participate in research leading to publications in top statistical and domain science journals, as well as present his or her research at multiple conferences.

To apply E-mail (PDF files if possible) the following items to holans@missouri.edu: (1) a letter of interest, containing full contact information, year graduated and citizenship/immigration status, concisely responding to the research emphases and criteria above; (2) a CV listing educational background, research experience and publications; and (3) abstracts of the dissertation and any publications. The cover letter or CV should include names and contact information for three references (no letters please). Please indicate “NCRN Postdoc” in the subject field of the message.

The application pool will remain open until the position is filled but applications received by December 10, 2012 will be guaranteed full consideration.

*University of Missouri is an Equal Opportunity/Affirmative Action Employer and Educator.*