

NATIONAL INSTITUTE OF STATISTICAL SCIENCES

NEW SPATIAL MODELING PROJECT AT NISS

EARLY CAREER RESEARCHER POSITION

The National Institute of Statistical Sciences (NISS) is a research institute focused on bringing advances in statistics to high priority projects with national / international impact. Early career researchers at NISS have the opportunity to work with researcher leaders to develop innovative statistical solutions to high impact problems.

CAREER OPPORTUNITY in SPATIAL STATISTICS

This project will develop and implement new spatial statistical methodology for massive education datasets. The appointment will be for one year with expectation of renewal. The position will remain open until filled.

RESEARCH CHALLENGE

Develop, implement and test innovative spatial statistical methodologies.

Apply GIS technology to high-profile social, economic and education data (*American Community Survey*, US Department of Education surveys and assessments).

Conduct research with three-part objective:

- (1) Methodology for spatial modeling and estimation with changes of support for survey data;
- (2) Uncertainty quantification and computation for combining different sources of uncertainty, e.g., from survey sampling and from spatial dependence models;
- (3) Design and analysis of simulations and experiments to validate new methodology and models developed.

RESEARCH TEAM

Senior Mentor: **Christopher Wikle** (Professor, University of Missouri)

Co-supervisor: **Nell Sedransk** (Director, NISS-DC)

Collaborators: **NCES** lead researchers (National Center for Education Statistics, US Department of Education)

APPLICANTS

Education: Doctorate in statistics or related discipline expected or completed within the last 5 years.

Specific Knowledge: Spatial/spatio-temporal modeling, statistical computation, high-dimensional data analysis.

Experience or Interest: Survey data and official statistics, GIS analysis and methodology.

Research: Demonstrated ability with professional publications and/or presentations.

Other Requirements: Commitment to collaborative research, excellent verbal and written communication skills.

Citizenship: US Citizens or non-citizens with current active Census Bureau security clearances for restricted data.

The National Institute of Statistical Sciences is an Equal Opportunity/Affirmative Action Employer

POSITION

Location: Washington, DC.

Salary: Dependent upon qualifications and experience. Recent PhD recipients could expect \$85,000 per year.

Dates: Appointment starting any time after 15 August 2019; application pool open until position is filled.

Expectations: Active participation in research with publications in top statistical and domain science journals, also presentations at national professional conferences.

APPLICATION – SUBMIT VIA EMAIL TO positions@niss.org

Letter of Interest: Full contact information, year graduated, concise response to research emphases above.

CV: Educational background (including relevant coursework), research experience, publications.

References: Contact information for three references (no letters please).