

Opportunity Title: NSF Statistics Research, Analysis & Data Visualization

Opportunity Reference Code: NSF-NCSES-2019-0001

Organization National Science Foundation (NSF)

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**Description** This opportunity is open until filled. Status: Active 10/8/2019.

The National Center for Science and Engineering Statistics (NCSES) — part of the National Science Foundation (NSF) — is the world's premier source for data and information on the science and engineering enterprise. NCSES is one of only thirteen principal statistical agencies in the U.S. federal government.

This is an open opportunity to participants in a wide variety of fields including, but not limited to, Bioinformatics, Biophysics, Business Management, Communications and Graphic Design, Computer Sciences, Computational Biology, Demography, Economics, Engineering, Epidemiology, Finance, Geographic Information Systems (GIS), Marketing, Mathematics and Statistics, Neurosciences, Physics, and Public Policy.

# Project – Science and Engineering Statistics Research and Data Visualization

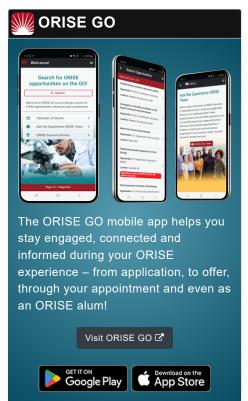
NCSES is seeking participant involvement in a variety of interesting and original activities. These challenging projects make use of expertise from a variety of fields such as research and analysis, statistics, economics, survey methodology, demography, data science, data visualization, graphic design, data journalism, communications, and project management, among others.

The scope of the work relates to both domestic and international data and information. Participants will have the opportunity to make use of, or support and improve, NCSES and other available data on

- Innovation
- Research and development (R&D)
- · The science and engineering workforce
- U.S. competitiveness in science, engineering and technology, and
- Science, technology, engineering, and math (STEM) education.

Participants may have the opportunity to be part of a data collection program, to search for and analyze key trends and patterns, and to visualize their analyses in novel and informative ways. Both independently, and as part of a team effort, participants may help define specific projects that will advance the Center's ability to generate, document and analyze statistics on the science and engineering enterprise. Individual innovation and novelty in approach and techniques (including the use of







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non-survey data and methodologies) are highly desirable.

There will also be opportunities to collaborate with some of the world's leading experts on the science and engineering enterprise and in fields such as statistics, survey methodology, and economics. These interactions will inform policy discussions related to the science and engineering enterprise, the federal data strategy, and potentially to support key NCSES and National Science Board products such as Science and Engineering Indicators; the National Patterns of R&D Resources; the Women, Minorities, and Persons with Disabilities in Science and Engineering Report; and the Annual Business Survey, which includes data on R&D, innovation, technology and globalization, among others.

### **Appointment Length**

Opportunity includes full-time one year appointment and may be extended contingent upon project needs and funding availability. The maximum time a participant can remain in the ORISE program is five years from his/her initial start date.

### **Participant Benefits**

Selected candidates will receive a competitive stipend for living and other expenses during this appointment, determined by NSF. Stipends are typically based on the participant's academic standing, discipline, and experience. Candidate may also be eligible to receive a health insurance allowance and reimbursement for travel expenses.

To learn more about NCSES, visit https://www.nsf.gov/statistics/. Learn more about careers with the National Science Foundation at https://www.nsf.gov/careers/.

## **Nature of the Appointment**

The participant will not enter into an employee/employer relationship with ORISE, ORAU, NSF, or any other office or agency. Instead, the participant will be affiliated with ORISE for the administration of the appointment through the ORISE appointment letter and Terms of Appointment.

## Qualifications

Applicants must meet the following requirements:

- Have received or expect to complete all requirements for a Master's or Doctoral degree in Communications & Graphic Design, Computer Sciences, Engineering, Physics, Mathematics & Statistics, or similar field in the life, health and medical sciences or business sectors.
- Be a U.S. Citizen.

Preferred candidate will have:



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- Computer programming skills (e.g., R, Phython)
- Familiarity with analytical software, such as R, Python, EViews, SAS, etc.
- · Knowledge and experience in data analysis
- Ability to work in a cooperative, collaborative environment
- · Independent and highly motivated

A complete application consists of:

- Zintellect Profile
- Essay Questions (goals, experiences, and skills relevant to the opportunity)
- Resume (PDF)
- Academic Records For this opportunity, an unofficial transcript or copy of the student academic records printed by the applicant or by academic advisors from internal institution systems may be submitted.
- Letter of Recommendation While a letter of recommendation is not required to be considered, applicants are required to provide contact information for one recommendation in order to submit the application.
  Applicants are encouraged to request a letter of recommendation before submission as this may help reviewers have a better understanding of the applicant's qualifications and interests. Letters of recommendation must be submitted on your behalf before selections are completed and offers are made.

Submitted documents must have all social security numbers, student identification numbers, and/or dates of birth removed (blanked out, blackened out, made illegible, etc.) prior to uploading into the application system. All documents must be in English or include an official English translation.

If you have questions, send an email to SciEdPrograms@orau.org. Please list the reference code of this opportunity in the subject line of the email.

## Eligibility Requirements

- Citizenship: U.S. Citizen Only
- Degree: Master's Degree or Doctoral Degree.
- Discipline(s):
  - Business (5 ●)
  - Chemistry and Materials Sciences (4 ●)
  - Communications and Graphics Design (6 ●)
  - Computer, Information, and Data Sciences (6 ●)
  - Earth and Geosciences (1 ⑤)
  - Engineering (27 ●)
  - Life Health and Medical Sciences (5
  - Mathematics and Statistics (5 )
  - Other Non-Science & Engineering (3 ●)
  - Physics (16 ●)
  - Social and Behavioral Sciences (6 ♥)
- Age: Must be 18 years of age



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