PREP Research Associate

This position is part of the National Institute of Standards (NIST) Professional Research Experience (PREP) program. NIST recognizes that its research staff may wish to collaborate with researchers at academic institutions on specific projects of mutual interest, thus requires that such institutions must be the recipient of a PREP award. The PREP program requires staff from a wide range of backgrounds to work on scientific research in many areas. Employees in this position will perform technical work that underpins the scientific research of the collaboration.

Research Title:
Information Technology administration automation using Powershell in an Office365 environment

Dates/Hours/Location: June 1, 2025 – August 29, 2025, 40 hours/week, NIST Gaithersburg

The work will entail:
Turning existing manual processes in our Office365 environment into automated processes by creating interactive Powershell programs. The Powershell programs will capture inputs by either manual input or ingesting a spreadsheet and then will perform automated operations on our development Office365 environment.

Key responsibilities will include but are not limited to:
- Writing Powershell scripts that will be deployed in our Office365 development environment
- Collecting user feedback from information technology professionals
- Developing automated pipelines based on synthesizing existing manual processes
- Learning fundamental concepts of standard information technology security practices, to include pursuing relevant certifications and training
- Documenting code and writing code to improve its reusability

Qualifications

- Currently pursuing a bachelor's or associate's degree in Computer Science, Information Technology, Mathematics, or a related field.
- Interest in the fields of computer science and information technology.
- Familiarity with PowerShell (or similar scripting experience, such as Python).
- An understanding of information technology security practices.
- Strong oral and written communication skills.

Privacy Act Statement

Authority: 15 U.S.C. § 278g-1(e)(1) and (e)(3) and 15 U.S.C. § 272(b) and (c)

Purpose: The National Institute for Standards and Technology (NIST) hosts the Professional Research Experience Program (PREP) which is designed to provide valuable laboratory experience and financial assistance to undergraduates, post-bachelor's degree holders, graduate students, master's degree holders, postdocs, and faculty.

PREP is a 5-year cooperative agreement between NIST laboratories and participating PREP Universities to establish a collaborative research relationship between NIST and U.S. institutions of higher education in the following disciplines including (but may not be limited to) biochemistry, biological sciences, chemistry, computer science, engineering, electronics, materials science, mathematics, nanoscale science, neutron science, physical science, physics, and statistics. This collection of information is needed to facilitate administrative functions of the PREP Program.

Routine Uses: NIST will use the information collected to perform the requisite reviews of the applications to determine eligibility, and to meet programmatic requirements. Disclosure of this information is also subject to all the published routine uses as identified in the Privacy Act System of Records Notices: NIST-1: NIST Associates.

Disclosure: Furnishing this information is voluntary. When you submit the form, you are indicating your voluntary consent for NIST to use of the information you submit for the purpose stated.