PREP Research Associate

This position is part of the National Institute of Standards and Technology (NIST) Professional Research Experience Program (PREP). NIST recognizes that its research staff may want to collaborate with researchers at academic institutions on specific projects of mutual interest and, therefore, requires those institutions to be recipients of a PREP award. The PREP program involves staff from a wide range of backgrounds conducting scientific research across various fields. Individuals in this position will perform technical work supporting the collaboration's scientific research.

Research Title:
Developing Interactive Visualization Tools for AI Evaluation Data

The work will entail:

Key Responsibilities:
- Familiarize with NIST's work on AI risk and impact assessment and measuring contextual robustness, including needs for interactive data visualization in this context
- Create mockups of interactive data visualization tool(s)
- Research different toolkits available for interactive data visualization
- Propose system architecture(s) for the tool(s)
- Develop, test, and document interactive data visualization tool(s)

Deliverables:
- Visual mockups of the tool(s)
- Documentation of the proposed system architecture(s)
- Code implementing the tool(s)
- Thorough test suite(s) for the code
- Comprehensive documentation

U.S. Citizen Preferred

Qualifications
- Background in Computer Science, Software Engineering, Data Science, or related field.
- Education level: Post-Master's degree; Post-Bachelor's will also be considered.
- Strong interest in data visualization, software development, AI measurement
- Experience with software development in Python, version control systems, databases, and the shell
- Experience with building interactive data visualization tools and AI evaluation preferred.

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.