

PRAC Data Science Fellow Pandemic Response Accountability Committee January 5, 2022

The Pandemic Response Accountability Committee (PRAC) is seeking current and recent undergraduate and graduate students to serve as a data science fellow to support its mission. The Coronavirus Aid, Relief, and Economic Security (CARES) Act created the PRAC, composed of federal Offices of Inspector General to "promote transparency and conduct and support oversight of covered funds and the Coronavirus response to (1) prevent and detect fraud, waste, abuse, and mismanagement; and (2) mitigate major risks that cut across program and agency boundaries." The PRAC is currently overseeing about \$2.6 trillion in federal spending. Rather than a standalone organization, the PRAC is a Committee of the Council of the Inspectors General on Integrity and Efficiency (CIGIE), an independent entity established within the executive branch by the Inspector General Act of 1978, as amended, that includes the 75 statutorily created federal Inspectors General with a mission to address integrity, economy, and effectiveness issues that transcend individual government agencies.

The CARES Act created the PRAC and requires the PRAC to coordinate and support Inspectors General on matters related to oversight of covered funds and the Coronavirus response, review whether the reporting of contracts and grants using covered funds meets applicable standards and specifies the purpose of the contract or grant and measures of performance; and review the economy, efficiency, and effectiveness in the administration of, and the detection of fraud, waste, abuse, and mismanagement in, Coronavirus response programs and operations.

To support this exciting mission, the PRAC is establishing the PRAC Fellowship Program which is seeking current and recent graduate students to serve the PRAC mission for up to two years. The PRAC is looking for individuals in the data science field with the requisite education and skills to provide data-driven insights and help solve complex problems for the PRAC member IGs. Each fellow will be assigned to a partner Office of Inspectors General (OIG) to support an analytical project based on an identified business need and help improve the scale and efficiency of their activities. The fellow will serve in a consulting role providing support to address OIG by delivering actionable insights.

The Data Science Fellow is responsible for:

- Driving analytic projects with our OIG partners to address an identified business need involving the oversight of covered funds.
- Developing risk scoring models to identify potential instances of fraud, waste abuse and mismanagement and prioritize efforts to the areas of greatest risk.
- Analyzing complex datasets to identify actionable insights and communicate results to support data-driven decisions.

The candidate should have a strong understanding of analytic principles, techniques, and tools. The fellow reports directly to the PRAC Fellowship Program Coordinator.

In addition to gaining federal sector experience and knowledge, selected candidates can expect to further refine their existing data science and analytic skills on diverse, real-world challenges that have a direct impact on their fellow citizens. The stories of scale, accomplishment, and impact will be unmatched by any other opportunity.

To recruit and retain the best candidates, provide a positive work environment, and mitigate the risk of current and future pandemic-related workplace disruptions, the PRAC is organized and managed as a distributed workforce in a virtual workplace with a small physical footprint in Washington, DC.

Duties

As a Data Science Fellow for the PRAC, you will be part of an exciting mission with the opportunity to deliver an impact by transforming data into insights to assist with the oversight of the \$2.6 trillion in coronavirus relief spending. The Data Science Fellow will be assigned to a PRAC member OIG to provide analytic support based on an identified business need.

More specifically, the Data Science Fellow may:

- Consult with OIG stakeholders to understand the business need and provide analytic solutions
- Leverage analytic, statistical, and programming techniques (e.g. SQL, R, Python) to collect, analyze, and interpret large and/or complex datasets to develop data-driven solutions
- Build and implement risk models and rules, working across the entire model lifecycle to include testing and deployment
- Implement and validate predictive models in languages such as R and Python, as well as create and maintain statistical models
- Conduct anomaly detection using various AI/ML techniques
- Develop dashboards and visualizations to identify trends and patterns
- Perform extraction, transform and load (ETL) tasks
- Identify applicable datasets to support the identified use-case, to include commercial, government and open sources
- Attend ongoing meetings with the project stakeholders providing status updates, communicate outcomes and collaborate on product development

The assigned duties for each project will vary slightly based on the need of the OIG. Due to the wide range of potential projects and varying degrees of complexity, the program will be accepting both undergraduate and graduate students. Undergraduate students should be familiar with at least one programming language (e.g. R, Python) and have experience building and

implementing analytic models (either through work experience or coursework/projects). Graduate students will be expected to support OIG partners with their identified business needs using advanced analytic techniques.

Eligibility Requirements

The fellowship program is open to recent graduates (Full Time) or continuing college or university students ranked by semester hours as a junior (60-89 hours), senior (90 or more hours), or graduate student who is:

- 1. Currently enrolled or a recent graduate in a degree program at an accredited college or university, at least part-time, i.e., maintaining at least a half-time course load as defined by the educational institution.
- 2. In good academic standing, with a grade point average (GPA) of at least 3.0 on a 4-point scale; and
- 3. A U.S. citizen.

Fellows may not work in the same program area as a relative. Fellows or their direct relatives may not have received any pandemic relief loans or grants.

The candidate should have experience or educational courses/projects building and implementing analytic products using a variety of tools. The candidate should have a basic understanding of analytical statistical, and programming techniques (e.g. R, Python, SQL) and basic knowledge of statistical concepts to analyze data and provide insights. The candidate should have strong communication skills and experience in fraud detection is a plus.

How to Apply

For immediate consideration, please email a cover letter summarizing your qualifications and a resume to prac_jobs@cigie.gov, with the subject line: Data Scientist Fellowship