DATA SPECIALIST

Req #: 190447
Department: INSTITUTE FOR HEALTH METRICS AND EVALUATION
Posting Date: 05/19/2021
Closing Info: Open Until Filled
Salary: Salary is commensurate with education and experience
Union Position: Yes
Shift: First Shift

As a UW employee, you have a unique opportunity to change lives on our campuses, in our state and around the world. UW employees offer their boundless energy, creative problem solving skills and dedication to build stronger minds and a healthier world.

UW faculty and staff also enjoy outstanding benefits, professional growth opportunities and unique resources in an environment noted for diversity, intellectual excitement, artistic pursuits and natural beauty.

The Institute for Health Metrics and Evaluation (IHME) is an independent research center at the University of Washington. Its mission is to deliver to the world timely, relevant, and scientifically valid evidence to improve health policy and practice. IHME carries out its mission through a range of projects within different research areas including the Global Burden of Diseases, Injuries, and Risk Factors; Future Health Scenarios; Costs and Cost Effectiveness; Resource Tracking; and Impact Evaluations. Our vision is to provide policymakers, donors, and researchers with the highest-quality quantitative evidence base so all people live long lives in full health.

IHME is committed to providing the evidence base necessary to help solve the world’s most important health problems. This requires creativity and innovation, which is cultivated by an inclusive, diverse, and equitable environment that respects and appreciates differences, embraces collaboration, and invites the voices of all IHME team members.

**IHME has an exciting opportunity for a Data Specialist to join our Resource Tracking US Spending research team.** The Data Specialist is expected to become specialized in data pertaining to the US Healthcare Spending research project. They will work closely with the faculty lead, research manager, researcher, research scientist, a team of data analysts, and data services specialists, and researchers on the Central Computation and Clinical Informatics research teams to amass relevant data and contribute to analysis, presentation, and publication. To create the array of indicators required, this position integrates all available relevant quantitative data from surveys, budget and annual reports, project databases, and administrative
records into central databases. The Data Specialist will make use of innovative, cutting-edge analytic methods to help produce estimates of US health spending. This position will involve additional work alongside other research staff on complementary projects and will require knowledge and skill sharing and collective problem-solving. Overall, the Data Specialist will be a critical member of an agile, dynamic research team.

We are looking for someone who has a command of a variety of research needs and analytic functions. The Data Specialist must be able to independently translate requests into actionable results by writing and implementing novel code. The individual must be adept at navigating complex databases and analytic engines, be able to design and interpret diagnostics, and troubleshoot problems in order to resolve them. They must be able to independently interpret results to assess their quality and must be able to assess, transform, and utilize a broad array of quantitative data using multiple coding languages (R and ideally Python). Frequently the individual will be given assignments where a desired objective is identified but there is no preset path laid for achieving it. The individual therefore must carry out individual planning and problem solving to resolve computational questions and produce results.

The Resource Tracking US Spending research team develops research intended to describe and assess health care spending in the US. Previous research from this team has been published in a wide set of journals, presented around the globe and online through an interactive visualization. The research produced by this team will be extended to focus on subnational geographic variation in order to gain knowledge about changes in health care spending and utilization, and spending disparities across the US. The research is policy-relevant, with the team at a unique moment of expansion in scope. This position is contingent on project funding, which currently exists for three years with hopes for extension.

Responsibilities:

Research Command
- Develop a core understanding of input data used by the team and the quantitative methods used to harmonize and combine data from a wide variety of data sources, with focus on estimating personal health care spending into conditions, age and sex groups, and types of care for over 3,100 US counties.
- Under the guidance of experienced scientist and/or faculty, carry out quantitative analyses and statistical modeling to produce results designated on a given timeline as part of the US Disease Expenditure County-Level Analysis project. Design and articulate ways to improve routine computational processes, including the relevant trade-offs of different approaches, for decision-making purposes.

Data Management and Analytics
- Problem-solve computational and analytic challenges by investigating the data, understanding the root questions, and coming up with alternative measurement strategies.
- Design, implement, and execute improvements to complex machinery to compute estimates of indicators. Optimize performance of machinery while running it to generate indicators as part of the annual production cycle.
- Maintain, update, and improve upon databases and diagnostics of the data.
- Enhance and execute analytic engines, statistical models, and tools to carry out functions responsive to the analytic questions to be resolved.
- Execute queries and complete novel analytics to answer questions from senior researchers, collaborators, donors, and other stakeholders.
- Create and execute diagnostics and summary reports on data, databases, and routine computational processes to assess performance and results.
- Develop and use protocols to identify problems with datasets and routine computational processes, rectify issues, and systematize data for future analyses.
- Assess and contribute to decision-making about what type of coding language and approach to use in accomplishing routine computational tasks.
• Transform and format datasets for use in ongoing analyses. Catalog and incorporate these datasets into databases. Perform quality checks.
• Develop novel representations of data and results for senior researchers and other stakeholders.
• Assess results and provide input on validity.
• Create new code functions to add to a common code library to make more efficient commonly needed tasks.

**General**
• Create tables and figures, and generate text for presentations and publications, drawing upon data and information from a multitude of sources.
• Communicate clearly and effectively while contributing as a member of the Institute.
• Work closely with other team members to assist with relevant tasks, facilitate learning new skills, and to help resolve emerging problems on different projects.
• Serve as a resource to others in explaining analytic approaches, describing data, and instructing how to implement code. Participate in and/or lead internal trainings.
• Participate in overall community of the Institute, carrying out duties as required as team members with other Institute members.

As a UW employee, you will enjoy generous benefits and work/life programs. For a complete description of our benefits for this position, please visit our website, [click here](https://uwires.admin.washington.edu/eng/candidates/default.cfm?szCategory=jobprofile&szOrderByID=190447&szCandidateID=0&szSearchWords=&s... 3/5)

**REQUIREMENTS**

• Bachelor’s degree in social sciences, engineering, computer science, biostatistics, economics, or related field plus four years’ related experience, or equivalent combination of education and experience.

**Additional Requirements:**
• Demonstrated success in developing and implementing complex code in R or Python.
• Experience using hierarchical modeling methods.
• Interest in health financing or health policy research, and the related data sources and scientific underpinnings.
• Demonstrated self-motivation and evidence of self-direction. Agility with detailed information and data. Demonstrated flexibility and mature communication skills with an ability to thrive in a fast-paced, energetic, highly creative, and entrepreneurial environment.
• Ability to learn new information quickly and apply analytic skills to better understand complex information in a systematic way.
• Strong quantitative aptitude and agility making sense of new data.
• Direct experience with quantitative data from a wide range of disparate sources, including surveys, registries, administrative data, vital registration systems, and research studies.
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• Demonstrated experience with one or more of the key research areas as undertaken at IHME. Ability to explain the major tenets, principles, and purpose of a subset of the analytic work.
• Experience interpreting results and diagnostics in order to help manage quality control system of the input data and results.
• Ability to compartmentalize, illustrate, and explain how code implements analytic strategies.

*A commitment to working to alongside others at IHME to illuminate the health impacts of systemic racism and to work within IHME to make our organization more diverse and inclusive. See IHME’s DEI statement here: [http://www.healthdata.org/get-involved/careers/dei](http://www.healthdata.org/get-involved/careers/dei)*
Equivalent education/experience will substitute for all minimum qualifications except when there are legal requirements, such as a license/certification/registration.

DESIRED

- Master’s degree in social sciences, engineering, computer science, biostatistics, economics, or related field plus one year related experience, or equivalent combination of education and experience.
- Experience in health financing or health policy analysis, and/or experience using related data sources and scientific underpinnings.
- Expertise in research using R and Python.

CONDITIONS OF EMPLOYMENT

- Weekend and evening work sometimes required.
- This position is open to anyone authorized to work in the US. The UW is not able to sponsor visas for staff positions.
- Office is located in Seattle, Washington. This position is eligible to work fully remote in the US; work schedule required to overlap 50% of IHME office hours, between 8 a.m. and 6 p.m. Pacific Time.

Committed to attracting and retaining a diverse staff, the University of Washington will honor your experiences, perspectives and unique identity. Together, our community strives to create and maintain working and learning environments that are inclusive, equitable and welcoming.

Application Process:
The application process for UW positions may include completion of a variety of online assessments to obtain additional information that will be used in the evaluation process. These assessments may include Workforce Authorization, Cover Letter and/or others. Any assessments that you need to complete will appear on your screen as soon as you select “Apply to this position”. Once you begin an assessment, it must be completed at that time; if you do not complete the assessment you will be prompted to do so the next time you access your “My Jobs” page. If you select to take it later, it will appear on your “My Jobs” page to take when you are ready. Please note that your application will not be reviewed, and you will not be considered for this position until all required assessments have been completed.

Applicants considered for this position will be required to disclose if they are the subject of any substantiated findings or current investigations related to sexual misconduct at their current employment and past employment. Disclosure is required under Washington state law.
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The University of Washington is a leader in **environmental stewardship & sustainability**, and committed to becoming climate neutral.

**The University of Washington is an affirmative action and equal opportunity employer.** All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, gender expression, national origin, age, protected veteran or disabled status, or genetic information.

To request disability accommodation in the application process, contact the Disability Services Office at 206-543-6450 or dso@uw.edu.

Apply for this job