DATA SPECIALIST

DATA SPECIALIST

Req #: 196172
Department: IHME (Institute for Health Metrics & Evaluation)
Job Location Detail: eligible to work fully remote in the US
Posting Date: 09/14/2021
Closing Info: Open Until Filled
Salary: Salary and benefits are competitive. Salary is commensurate with qualifications 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; Cost Effectiveness and Efficiency; 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 are 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 on the Demographics team. The Demographics team is a vital team in the Global Burden of Diseases, Injuries, and Risk Factors enterprise (GBD), a core research area for IHME. A systematic, scientific effort to quantify the comparative magnitude of health loss due to diseases, injuries, and risk factors by age, sex, and geography over time, the GBD is the largest and
most comprehensive effort to date to measure epidemiological levels and trends worldwide. The GBD’s aim is to provide policymakers, donors, and researchers with the highest-quality quantitative evidence base to make decisions that achieve better health. The Demographics team provides the fertility, mortality, and population estimates for the rest of the GBD.

This position will work team with a dynamic team of researchers and staff at all levels on an assigned research team. The Data Specialist is expected to become specialized in data pertaining to fertility, mortality, and population modeling and the processing of vital registration, census, and survey data for the Admin 2 level and lower. They will consult with researchers as needed to amass relevant data for analysis, presentation, and publication. To create the array of indicators required, this position integrates all available relevant quantitative data from surveys, censuses, literature, and administrative records into central databases. The Data Specialist will make use of innovative, cutting-edge analytic methods to help produce comparable estimates of the impact of diseases, injuries, and risk factors across the globe.

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, and 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, Stata, Python).

Frequently the individual will be given assignments where a desired end result 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.

This position will additionally 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. This position is contingent upon project funding availability.

**Responsibilities:**

**Research command**

- Exhibit command of one or more of the research areas at IHME, including their basic tenets, principles, and the nature of the data and results.
- Work directly with researchers to identify the source of data used in models and results, understand the context of the data, and ensure that they are relevant to the analyses themselves.
- Design and articulate ways to improve routine computational processes, including the relevant tradeoffs 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, 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 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.

Requirements include:

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

Additional requirements include:

• Demonstrated success in developing code in R.
• Ability to navigate and modify code in Python and Stata.
• Experience extracting and processing weekly vital registration data.
• Experience geomatching data from surveys, censuses, and vital registration to granular locations.
• Interest in global health, population health, and/or ways in which quantitative research and data science can be used to create valuable global public goods.
• 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.
• Demonstrated experience with one or more of the key research areas undertaken at IHME. Ability to explain the major tenets, principles, and purpose of a subset of the analytic work.
• Experience interpreting results and diagnostics 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 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: DEI.

Equivalent education/experience will substitute for all minimum qualifications except when there are legal requirements, such as a license/certification/registration.

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.
- The University of Washington requires students and personnel to be vaccinated against COVID-19 as a condition of employment. To learn more about the requirements, please review the following: https://www.ehs.washington.edu/covid-19-prevention-and-response/uw-covid-19-vaccination-policy?_ga=2.31959098.540467107.1629831944-1755727657.1623616042
- Office is located in Seattle, Washington. This position is eligible to work fully remote in the US.

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.

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 may include Work 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.
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.

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.

Per Governor Inslee's Proclamation 21-14.1, employees of higher education and healthcare institutions must be fully vaccinated against COVID-19 no later than October 18, 2021 unless a medical or religious exemption is approved. Being fully vaccinated means that an individual is at least two weeks past their final dose of an authorized COVID-19 vaccine regimen. As a condition of employment, newly hired employees will be required to provide proof of their COVID-19 vaccination. Updated information about how to provide proof of vaccination or request a medical or religious accommodation will be posted as soon as it is known.

Apply for this job