THE UNIVERSITY OF BRITISH COLUMBIA

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Research Assistant / Statistical Analyst

POSITION IDENTIFICATION

Position Title:	Research Assistant
Classification Title:	Graduate Academic Assistant (GAA)
VP/Faculty:	Medicine
Department:	School of Population and Public Health (SPPH)
Pay/hours:	CAD $31.25-$35.5 per hour (based on experience; ~12-18 hours per week).
Duration:	June-August 2024 (with possibility to extend, subject to performance)
Positions Available:	1-2
Reporting:	Dr. M. Ehsan Karim, Assistant Professor, SPPH, UBC

JOB SUMMARY

The Research Assistant will be involved in advanced statistical analysis, reproducing and applying methodologies from specific scientific articles on machine learning and causal inference.

ORGANIZATION STATUS

This project operates out of the School of Population and Public Health (SPPH), Faculty of Medicine, at the Vancouver Campus of the University of British Columbia (UBC). The nominated principal investigator for this project is Dr. Ehsan Karim, an assistant professor in Health Data Science at the UBC SPPH.

RESPONSIBILITIES

The successful candidate will be responsible for the following activities, working closely/in collaboration with the principal investigator:

- Implement Research Methods: Apply rigorous methodologies tailored to the specific goals of the project. Ensure that all methods are robust and reproducible. For this project, we are particularly interested in the use of machine learning methods within the context of making causal inference.
- Coding and Software Development: Write and maintain clean, efficient, and well-documented code for data analysis and simulation tasks.
- Data Analysis and Visualization: Analyze datasets using advanced statistical techniques and software. Create compelling visualizations to illustrate research findings and communicate complex data in an understandable format.
- Quality Assurance and Debugging: Conduct thorough testing and debugging of all coding projects to ensure the reliability and functionality of software applications. Address any issues that arise during the development phase promptly.
- Collaboration and Knowledge Sharing: Work closely with the research team to share findings, exchange ideas, and integrate different methodological approaches. Participate in regular discussions to stay informed of new technologies and methods in the field.
- Documentation and Reporting: Maintain detailed documentation of all coding scripts, methodologies, and data analysis procedures. Regularly report on project progress, challenges, and milestones to the principal investigator and research team.
- Ethical Standards and Data Security: Adhere to strict ethical standards in handling and

processing data. Implement robust data security measures to protect sensitive information and ensure compliance with privacy regulations.

- Contribute to Dissemination and Publication: Assist in preparing manuscripts for publication in peer-reviewed journals and presentations at conferences. Ensure that all research outputs meet high standards of clarity and impact.

SUPERVISION RECEIVED
The Research Assistant will work closely with and report to the nominated principal investigator. The Research Assistant will undergo instructions either at SPPH or online.

SUPERVISION GIVEN None expected at this time.

WORKING CONDITIONS
The Research Assistant will be located in the SPPH building. A desk in a shared workspace will be provided, but may have the option to work remotely, subject to the supervisor's approval.

QUALIFICATIONS
- Bachelor's or Master's degree in a relevant field (e.g., biostatistics, statistics).
- Experience in machine learning and causal inference.
- Excellent organizational and communication skills.
- Proficiency in using data analysis software.
- Ability to work independently and as part of a multidisciplinary team.
- Reliable and able to maintain accuracy and attention to detail.

> **Application Requirements:**
> - Cover Letter, detailing your interest in the position, relevant courses, and relevant experience (e.g., causal inference, machine learning).
> - Resume or CV.
> - Unofficial transcript of your current or most recent degree.
> - Contact information for two references who can speak to your work ethic.

Application Deadline:
May 31st, 2024. However, please note that applications will be reviewed on a rolling basis, and the position will remain open until filled. We strongly encourage interested candidates to apply soon.

How to Apply:
Please submit your full application package as per the application requirements to ehsan.karim@ubc.ca.

Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Metis, Inuit, and/or Indigenous person.