

Algoma University is committed to undoing systemic and institutional discrimination and being publicly transparent and accountable. Diversity, equity, and inclusion are fundamental to our Special Mission. In keeping with the Seven Grandfather teachings that are the core values that inform our decisions as an institution, we are committed to creating a welcoming, inclusive, respectful, and safe environment where everyone belongs. We live these values through the strength and richness that diversity brings to our workforce and welcome contributors from equity-deserving groups including: Indigenous Peoples, Black and racialized persons, women, Persons with Disabilities, 2 Spirit, Lesbian, Gay, Bisexual, Transgender, and Queer persons.

Job Title:	Research Assistant - Economics & Data Science
Position Status:	NOHFC Internship (Full-Time, one-year contract)
Department:	Dept. of Finance, Economics, and Decision Science (FEDS) Department of Computer Science and Mathematics
Supervision Received:	Dr. Ahmed Aziz, Assistant Professor of Economics Dr. Zamilur Rahman, Assistant Professor of Computer Science
Supervision Exercised:	Undergraduate Student Research Assistants
Location:	Sault Ste Marie
Number of Positions:	1
Start Date:	Immediately
End Date:	One year after start date
Hours of Work:	35 hours per week, Monday to Friday
Wage:	\$39,000.00 per annum + 14% MERC

### PRIMARY FUNCTIONS:

Algoma University, Sault Ste. Marie, Ontario, Canada, is seeking an Economics & Data Science Research Assistant who will start immediately (no later than February 15, 2025).

We seek individuals with expertise in economics and data science and an interest in social science applications. Candidates from economics should have an interest in causal inference research design and the use of text datasets. Candidates from data science should have an interest in labour and public economics, social science, natural language processing, and machine learning. All candidates must demonstrate a strong interest in interdisciplinary research in data science and economics.





# RESPONSIBILITIES:

The research assistant will be responsible for:

- Gather, clean, and preprocess data from various sources, balancing data quality and velocity.
- Perform exploratory data analysis to uncover meaningful patterns, trends, and insights using natural language processing and data visualization techniques.
- Utilize econometric methods to establish causal relationships between social and economic factors.
- Report and present research findings and developments, including status and results, clearly and efficiently, both internally and externally, verbally and in writing.
- Participate in brainstorming sessions to contribute creative ideas.
- Managing relationships with external academic and non-academic partners and selecting suitable partners and projects for collaboration.
- Contributing to funding applications, data use agreements and IRB approvals.

## MINIMUM QUALIFICATIONS

- Graduates of an accredited Canadian university or college within the last three years with a bachelor's or master's degree in a relevant field such as Economics, Statistics, Computer Science, Data Science, Computational Linguistics, or a related discipline.
- Proficiency in programming languages and statistical software, particularly Python, R, STATA or similar software, is required to implement NLP, machine learning algorithms, and statistical and econometric analysis.
- Experience with data collection methods, web scraping, and data cleaning is expected.
- Relevant certifications or training courses in NLP, machine learning, data analysis, or related fields are desired.
- Previous involvement in projects related to NLP, text analysis, machine learning, or social research would be advantageous.

## CANDIDATE ELIGIBILITY:

To be eligible to participate in the NOHFC Internship, individuals must:

- Be new entrants into the workforce, are transitioning to a new career, or be unemployed or underemployed who are entering a new field;
- Have not previously participated in a NOHFC-funded internship;
- Be at least 18 years of age; and
- Reside and be legally entitled to work in Canada.





#### **APPLICATION PROCESS:**

Deadline for applications: Wednesday, January 29, 2024. Applications received by this deadline will be assured of consideration, though the posting remains open until the position is filled.

To apply, submit your application, including a current CV, to Dr. Zamilur Rahman (Email: <u>zamilur.rahman@algomau.ca</u>). Please use 'Research Assistant (Economics and Data Science)' as the subject line when sending your application.

Algoma University is strongly committed to fostering diversity and inclusivity within our community and is an equal-opportunity employer. The university invites and encourages applications from all qualified individuals who would contribute to the further diversification of our Institution, including equity-deserving groups that are traditionally underrepresented in employment (Indigenous peoples, racialized persons, women, persons with disabilities, and 2SLGBTQQIPA+ persons).

In accordance with the Accessibility for Ontarians with Disabilities Act, 2005, upon request, accommodation will be provided by Algoma University throughout the recruitment, selection, and/or assessment process to applicants with disabilities.

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