

Graduate Research Assistant Opportunity Casual Position – Faculty of Humanities and Social Sciences

AI-assisted Content Analysis for Social Science, with an application to analysis of citizens' comments on news media stories

Start Date: November 15, 2025 End Date: Approx. February 2026

Overview: The general aim of this project is to use a large language model service to build agents that conduct content analysis of publicly available comments on news media (e.g., comments left on online newspaper articles) related to housing, development, and the politics of housing more generally. This position is for a Research Assistant 1-R5/GRA 2. An extension may be negotiable between the RA and the principal investigator (PI).

Specific activities include, but are not limited to:

- 1) Scraping comments made in identified articles in large dailies like the *Globe & Mail* and the *National Post*.
- 2) Clean and preprocess the data
- 3) Set up the LLM and API management
- 4) Output data management
- 5) Build a web-interface such that the final project operates on a restricted-access website frontend, allowing future researchers to deposit a .CSV into the LLM and have the LLM analyze the provided comments.

The successful candidate will work with, and directly report to, Dr. Alexandre (Alex) Rivard at Athabasca University. Dr. Rivard will provide adequate training for the skills required.

Qualifications:

- -Undergraduate degree required
- -Preference for a graduate student in computer science or a related discipline
- -Python (or equivalent language/framework) proficiency
 - -API integration (Anthropic, OpenAI APIs)
 - -Data manipulation (pandas, numpy)
 - -Error handling and logging
 - -File I/O and data organization
 - Use of Python frameworks for web applications (e.g. Django, Flask)
- -Familiarity with web scraping
 - -Handling rate limits and authentication
 - -Data cleaning and management
- -Basic software engineering practices
 - -Version control (Git/GitHub)
 - -Writing clean, documented code
 - -Building modular, reusable functions
 - -Testing and debugging



- -Nice to have:
 - -Experience with LLM APIs specifically
 - -Understanding of prompt engineering concepts
 - -Database management
 - R statistical language skills
 - -Jupyter notebooks for documentation
 - -Cloud services (AWS/GCP)

How to apply:

Qualified individuals are encouraged to submit their application by email to Dr. Alexandre (Alex) Rivard at arivard@athabascau.ca. Applications should include (as a single PDF file) a cover letter that summarizes your skills, interests and experience; a current resume or curriculum vitae; an unofficial copy of your transcript; and the contact information for 1-2 references.

Evaluation of applications will begin immediately and will continue until a suitable candidate is found. All applicants are thanked for their interest in this position; however, only candidates selected for an interview will be contacted.

Athabasca University and the researchers are committed and seek to support equity in employment and research opportunities. We strongly encourage applications from Indigenous people, people of colour, people with disabilities, 2SLGBTQ+ people, women, and other historically marginalized groups. Applicants are welcome, but not required, to self-identify in their letter of application.

For more information on this Research Assistant Opportunity, please contact Alexandre Rivard, PhD at the coordinates below, on or before November 15, 2025.

Hours per week are approximate and may vary based upon activity. This position has a maximum of 40 hours.

Alex B. Rivard

<u>Arivard@athabascau.ca</u>