

The University Affiliated Research Center (UARC) for Sociotechnical Solutions www.arlis.umd.edu

2021–2022 Graduate/Undergraduate Student Employment Opportunity: Tracking and Geovisualizing Shifting Perceptions of the US during COVID-19

The University of Maryland Applied Research Laboratory for Intelligence and Security (ARLIS) seeks to hire 1-2 student research assistants to work on a project that will carry out an initial investigation and report on extracting and tracking US-focused narratives in several cities (currently planned to include Paris, Toronto, Melbourne). We will be investigating the different narratives related to the US that are prevalent in social and traditional media in each city, including what sentiments and attitudes towards the U.S. are associated with these narratives. Another element to this study is how the narratives and attitudes are distributed across both English and French. Knowledge of French is a significant advantage but not necessarily a requirement for this project.

The research assistants are expected to help develop a data architecture for storing and manipulating complex geolinguistic information. The assistants will perform literature reviews as needed, and assist with the collection and analysis of social media data. The latter includes topic modeling and sentiment analysis and so experience with these methods is a plus. Experience with web mapping and interactive dashboard tools is also a plus for this project as we plan to build a dashboard that visualizes topics geographically and maps trends over time. Ideally applicants would have some experience in at least one of these areas (either social media data analysis or web mapping). The assistants will also help the team to prepare PowerPoint slides as needed for short presentations and briefings on the project.

These positions are available immediately (up to 20 hours per week). Funding is also available for fall 2021-summer 2022.

Required skills:

- Familiarity with social media data collection and analysis (e.g., Twitter, news media) <u>AND/OR</u> at least 1 year of experience with geospatial information science including experience with interactive web mapping
- Experience working in a team, to strict deadlines, following established parameters
- Experience with at least one programming language (e.g., R, Python)

Preferred skills:

- At least one year of graduate level coursework prior to the start date
- Familiarity with current methodological and statistical methods in the social and behavioral sciences
- Experience carrying out qualitative and/or quantitative research, and identifying appropriate methodologies for specific research questions
- Experience carrying out or contributing to literature reviews
- Familiarity with textual analysis and Natural Language Processing technologies, such as data cleaning and pre-processing, topic modeling, sentiment analysis, and stance detection and/or familiarity with specific packages (spaCY, NLTK, etc)
- Proficiency in French and/or another language other than English
- U.S. citizen preferred

The preferred start date is as soon as possible. Review of applications will begin immediately and continue on a rolling basis. For consideration, please email Michelle Morrison (mmorrison@arlis.umd.edu) and include a resume or CV.



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