The School of Computer Science at Carleton University is accepting applications for a postdoctoral fellowship in Natural Language Processing (NLP) and Explainable AI. The anticipated start date will be September 2022 or as soon as possible with a duration of up to two years. The postdoctoral fellow will be involved in projects in NLP and Explainable AI for assessment of functional limitations and disability services.

The postdoctoral fellow will be offered a salary of $55,000 per annum, with the additional ability to opt into an extended health and dental benefit plan. The postdoc will be supervised with Dr. Majid Komeili, Dr. Kathleen Fraser and Dr. Boris Vukovic.

Research Project Overview

The postdoctoral fellow will be engaged in a project on using NLP and Explainable AI to augment disability-related assessment of functional limitations and service recommendations in higher education. The project involves analyzing questionnaire data to select relevant interview questions. The students free-text responses to the interview questions along with the initial questionnaire data will be used to generate recommendations along with rationales for the recommendations. The successful applicant will join our dynamic, multidisciplinary research team and would gain experience in ethical application of AI in disability services.

Position Duties and Responsibilities

The incumbent of this position will, under the direction of the supervisors, be responsible for leading the research activities of the project, including but not limited to

- Develop efficient NLP models and AI interpretability methods for the project.
- Fully participate in planning, implementing, and coordinating all aspects of the project including data collection/preparation, data analysis, model development and literature review.
- Write manuscripts for publication.
- Collaborate with an interdisciplinary team of scientists and practitioners and those with lived experience.

Qualifications

Minimum Qualifications
- Ph.D. in Computer Science, Engineering, Natural Language Processing, Computational Linguistics or related area.

Preferred Qualifications
- Expertise in NLP/language modeling and AI interpretability.
- Strong publication record in NLP, AI interpretability or related areas (including blogs, tutorials, etc).
- Expertise in major NLP and deep learning frameworks such as PyTorch, TensorFlow, Spacy as well as Transformer-based models.
- Strong communication, teamwork, and leadership skills.

Accommodations and Accessibility
Should you require a copy of this posting in an alternate format, please contact us as soon as possible and we would be happy to get one to you in a timely manner. We believe in the importance of supporting on the-job success for the incumbent and are pleased to discuss and/or provide specific tools, resources or other requirements for day-to-day work requirements, as needed.

About Carleton University:
Carleton University is a dynamic and innovative research and teaching institution with a tradition of leading change. Internationally recognized academics, staff, and researchers engage more than 31,000 students in over 100 programs of study. Learn more about our university and the city of Ottawa. School of Computer Science has 40 full-time faculty members and particular research strengths in machine learning and related areas. We are proud to be one of the most accessible campuses in North America, home to the READ Initiative, our centre of excellence in accessibility and the national office for the Canadian Accessibility Network (CAN), the upcoming Accessible Learning Lab, 24/7 Attendant Services in residence, and the Paul Menton Centre for Students with Disabilities, heralded as the gold standard for disability support services in Canada. Our researchers in accessibility have collectively attracted over $15M in grants for accessibility research in the last three years. Carleton's location in Ottawa, Ontario provides many opportunities for scholarship and research with numerous and diverse groups and institutions. Canada's capital has a population of over one million and reflects the country's bilingual and multicultural character.

Carleton University is committed to fostering diversity within its community as a source of excellence, cultural enrichment, and social strength. We welcome those who would contribute to the further diversification of our university including, but not limited to: women; visible minorities; First Nations, Inuit and Métis peoples; persons with disabilities; and persons of any sexual orientation, gender identity and/or expression. Carleton understands that career paths vary. Legitimate career interruptions will in no way prejudice the assessment process and their impact will be taken into careful consideration.

We thank all applicants for their interest, however, only those selected for an interview will be contacted. If contacted for an interview, please inform us should accommodation be required.

How to Apply
Candidates that would like to apply for this fellowship opportunity are invited to submit one single pdf file which includes the following materials to Professor Majid Komeili at majid.komeili@carleton.ca.

- A cover letter
- A current CV
- Two published papers or equivalent writing samples
- The names and contact information of three references. One reference should be your doctoral advisor.

Applications will be accepted until the position is filled.