



Postdoctoral Associate in Financial Analytics with Applications to Wildfire Risk and Management

Department of Statistical and Actuarial Sciences University of Western Ontario ("Western University")

Posting date: April 6, 2023

Applicants are invited for a Postdoctoral Associate in Financial Analytics. The successful applicant will develop and apply analytical and data science tools to study how fundamental risk mitigation tools from quantitative finance (for instance, the theory of real options) can be employed mitigate wildfire risk.

This work will be conducted under the supervision of Dr. Douglas Woolford and Dr. Matt Davison. The position will be held at the Wildland Fire Science Laboratory in the Department of Statistical and Actuarial Sciences at the University of Western Ontario.

This is a one-year (12 month) position with the possibility of renewal. The position is available immediately. The exact start date is negotiable. The salary will be \$70,000 and includes benefits. Additional funding is also available to support research related travel, including collaborative meetings and the dissemination of research results at meetings, conferences or workshops.

Qualified applicants should have a completed or nearly completed doctoral degree in Financial Modelling/Mathematics, Quantitative Finance, Statistics, Actuarial Science, or Analytics and Operations Research, or a related field, along with an interest in performing research in data-driven statistical methods and their novel application. Other required qualifications include demonstrated research abilities in financial analytics, strong communication and presentation skills, and experience working with complex data structures using modern data modelling software such as R or Python. Candidates with a background in one or more of the following areas will be preferred: quantitative risk management; time series, spatio-temporal modelling; mathematical finance; The work will be interdisciplinary and conducted in collaboration with researchers from other disciplines and researchers at a variety of government agencies. Consequently, experience and/or an interest in wildfire science and management and in applications generally is also important.

Applications will be accepted by email. To apply, please submit the following items as pdf files to Dr. Douglas Woolford (dwoolfor@uwo.ca):

- 1. A cover letter that outlines their qualifications and experience, interest in this position, and available start date;
- 2. An up to date curriculum vitae (CV) that includes contact information for three referees;
- 3. A list of graduate courses taken, and grades obtained; and
- 4. Up to three examples of representative research publications.

The review of applications will begin on May 29, 2023 and will continue until the position is filled.



We thank all applicants for their interest, but only those selected for an interview will be contacted.

About the Department of Statistical and Actuarial Sciences

The Department of Statistical and Actuarial Sciences (https://www.uwo.ca/stats/) offers an exceptional environment for interdisciplinary research, teaching, and training supported by 25 faculty members. It hosts undergraduate programs in Actuarial Science, Data Science, Financial Modelling and Statistics, graduate programs with M.Sc. and Ph.D. specializations, a professional Master in Data Analytics (together with the Department of Computer Science) and is also a key contributor to the new initiative that is unifying instruction in Data Science across the campus community. It is also involved in a collaborative professional Masters in Financial Economics program jointly offered with Economics, Law, and Business. Faculty within the department study a diverse range of both theoretical and applied problems and include members with joint appointments in Computer Science, Economics, Earth Sciences, Mathematics and affiliations with the Brain and Mind Institute.

About Western

With annual research funding exceeding \$220 million, and an international reputation for success, Western ranks as one of Canada's top research-intensive universities. From fundamental to applied discovery and other scholarly activities, its scholars advance knowledge that provides tangible benefits for the economic, social, health and cultural development of citizens in London, in Canada and around the world. For more information about Postdoctoral Services at Western, see https://grad.uwo.ca/postdoctoral services/.

Western Values Diversity

The University invites applications from all qualified individuals. Western is committed to employment equity and diversity in the workplace and welcomes applications from women, members of racialized groups, Indigenous persons, persons with disabilities, persons of any sexual orientation, and persons of any gender identity or gender expression. Accommodations are available for applicants with disabilities throughout the recruitment process.