

DATA ANALYTICS (3 tenure-track positions)

The Department of Management Sciences in the Faculty of Engineering at the University of Waterloo invites applications for three tenure-track faculty positions at the rank of Assistant Professor in **Data Analytics** with an anticipated start date of July 1, 2020. In the case of an exceptional candidate, an appointment at the rank of Associate Professor or Full Professor will be considered.

Applicants should hold a PhD or be near completion of their doctorate in related areas, and have demonstrated research and teaching potential in data analytics. We seek individuals with research and teaching interests at the interface of **Data Analytics** and **Operations Research (OR)**, **Information Systems (IS)**, or **Management of Technology (MOT)**. In particular, individuals in the following areas are encouraged to apply.

- i) **Data Analytics and Operations Research:** We seek applicants whose research involves problems at the intersection of Data Analytics and fields such as Operations Research, Industrial/Systems Engineering, and Operations Management. We are particularly seeking individuals with demonstrated research ability and have interests in Data Analytics focusing on interesting applications in domains such as Supply Chain Analytics, Service Operations Management, Advanced Production, Smart/Autonomous Systems, Healthcare Delivery, Energy, etc. The ideal candidates should be able to demonstrate their proficiency in OR/OM methodologies relevant to Data Analytics (e.g., optimization, stochastic processes, statistics, dynamic programming, simulation, etc.) and their experience in analysing large/complex data sets. Successful applicants should be capable and interested in teaching courses such as Statistics, Production Planning, Inventory Management, Supply Chain Management, and Simulation.
- ii) **Data Analytics and Information Sciences:** We seek applicants with experience and interest in large-scale data management and analysis, with an emphasis on solving real-world problems using cutting-edge data-intensive methods. Areas of interest include data systems, data mining, deep learning, and computational statistics. The successful applicant will be expected to teach undergraduate and graduate courses in areas such as database management systems, big data infrastructure, data mining, machine learning, and statistical methods for data analysis.
- iii) **Data Analytics and Management of Technology:** We seek applicants who study social behaviour and social phenomena using large-scale data. Areas of interest can include technological innovation, management of technology, and social impacts (e.g., ethical implications, built in biases) of new technologies, such as AI, big data, machine learning, etc. The successful applicant should be able to teach computational social science or courses that involve application of formal computational skills to a social science topic (e.g., social networks, cybersecurity, surveillance, etc.) at both the undergraduate and graduate levels. Applicants must hold a PhD in an area of social science such as economics, political science, sociology, psychology, or other closely related areas, with a strong background in statistical/econometric modeling (R, SAS, Stata, etc.), experimental design, machine learning, scripting languages (Python, JavaScript, etc), or databases (SQL, NoSQL, etc).

Successful applicants are expected to maintain an active program of research, to attract and supervise graduate and undergraduate students, and to participate in undergraduate and graduate teaching. The salary range at the rank of Assistant or Associate Professor is CAD \$110,000 to \$150,000. Negotiations beyond this salary range will be considered for exceptionally qualified candidates.

Management Sciences is a dynamic and growing interdisciplinary department in the Faculty of Engineering that has active research and teaching activities in Operations Research, Information Systems, and Management of Technology. The Department offers an undergraduate degree in Management Engineering, as well as Master's and PhD programs in Management Sciences.

Applications should be submitted electronically at: <https://mansci-webapps.uwaterloo.ca/OFAS/>
A cover letter indicating for which specific position the applicant wishes to be considered for, curriculum vitae, research vision statement, teaching vision statement (teaching evaluations if available), up to four sample publications, and the contact information for at least 3 references are required for the application to be considered fully complete. References will be contacted only if an applicant is shortlisted for a position.

Review of applications will begin on **October 1, 2019**. Deadline for all positions is **January 5, 2020**.

If you have any questions regarding the position, the application process, assessment process, eligibility, or a request for accommodation during the hiring process, please contact: Mrs. Gini Kennings, Administrative Assistant to the Chair, Department of Management Sciences, givan@uwaterloo.ca.

The University of Waterloo regards diversity as an integral part of academic excellence and is committed to employment equity and accessibility for all employees. As such, we encourage applications from women, Indigenous persons (First Nations, Métis and Inuit), persons with disabilities, members of diverse gender identities, and others who may contribute to the further diversification of ideas. At Waterloo, you will have the opportunity to work across disciplines and collaborate with an international community of scholars and a diverse student body, situated in a rapidly growing community that has been termed a "hub of innovation". All qualified candidates are encouraged to apply; however, Canadians and permanent residents will receive priority in the recruitment process.

Three reasons to apply: <https://uwaterloo.ca/faculty-association/why-waterloo>