Artificial Intelligence
for the Public Sector

INFONEX
Professional Development

FACULTY PROFILES

Steve Bennett

Director, Global Government Practice

SAS

As the Global Government Practice lead, Steve Bennett is passionate about helping governments around the world put their data to work for the citizens they serve. In his current role, he drives strategic industry positioning and messaging in global government markets. A thought leader in decision science and the application of analytics in government, Steve works to ensure that analytics solutions at SAS deliver maximum value for governments around the world.

Prior to SAS, Steve held a number of leadership positions during his 12 years in the U.S. Department of Homeland Security. Following the events of September 11th 2001, Steve led the design and application of quantitative analysis to inform some of the United States' most challenging security decisions, most recently as the Director of the National Biosurveillance Integration Center.

Over the course of his career in Government, he led numerous efforts to provide analytic decision support to senior officials in the White House and across the U.S. Government. Steve is relentless in his commitment to helping governments improve decision making, and pursues better organization, management, and use of data as critical to that endeavor.

Steve holds a doctorate in Computational Biochemistry from Stanford, as well as undergraduate degrees in Biology and Chemistry from Caltech, and has authored a number of publications. When not supporting improved analytics in government, he is coaching youth soccer, leading children's ministry at church, or building something in his workshop.

Kalyan Chakravarthy

Chief Information Officer

The Regional Municipality of Durham

Kalyan Chakravarthy(KC) is Chief Information Officer for the Regional Municipality of Durham. In this position he is responsible for establishing and implementing a long-term technology and customer experience strategy for the Region. KC has over 20 years of experience in private, public and not-for-profit sectors. He graduated his MBA from Smith School of Business and did a certificate course on Artificial Intelligence from MIT.

FACULTY PROFILES

Carter Cousineau

Managing Director, Centre for Advancing Responsible and Ethical Artificial Intelligence

The University of Guelph

Carter Cousineau is known for her relationship management expertise and a public speaker in the areas of innovation, leadership and strategic business planning. Her research interests are: emerging technologies, artificial intelligence, data sharing and human to computer interactions. Her current research focuses on semantic interoperability as a means to derive semantic concepts that can be made interpretable in AI systems for end-users. She has worked with top international technology start-ups, as well as provided managerial experience across a variety of not for profit, SMB and Fortune500 companies in enterprise markets.

She has conducted research in multidisciplinary settings; encouraged an entrepreneurial mindset in academia; prepared business plans and various types of proposals; and successfully delivered presentations on new ventures and programs in post-secondary institutions and the community. Carter is currently in-progress of completing her Doctor of Computational Sciences (PhD) from the University of Guelph. She holds a Masters in Technology and Innovation from the Booth School of Engineering Practice, an Honours Bachelor Degree, a Minor in Geography, as well as a Leadership and Management Business Certificate from McMaster University.

FACULTY PROFILES

Sevgui Erman

Chief Data Scientist & Director, Data Science Division

Statistics Canada

Sevgui Erman is Chief Data Scientist and Senior Director managing the Data Science Division at Statistics Canada. She is passionate about technology, big data, AI, and its use for public good. She has a background in engineering, math and IT, with wide experience in developing algorithms, models and systems in the private, public and academic sectors. Sevgui holds a PhD from the University of Paris-Sud in Signal processing & System control, two areas that have strong links to AI. She has published peer reviewed papers, such as IEEE and AMS publications. Prior to joining Statistics Canada, Sevgui managed the features integration and verification of the LTE TDD solution developed by Ericsson 4G Wireless. Previously, she worked at Nortel Networks R&D as a wireless systems project manager and optical systems subject matter expert for forward error correction algorithms.

She has experience in bringing academic research into practical applications. Sevgui holds a patent in electro-optical receiver CDR, which uses statistical modelling on a 10Gb/s (big) data channel for real-time system performance control. In early 2018 Sevgui spearheaded the foundation of a ML/AI solutions Hub within Statistics Canada, i.e. the Data Science Accelerator (DSA). Its purpose: to build data science capacity within the organization by solving concrete problems & delivering practical results that enable clients to move forward confidently with big & unstructured data. The DSA operated as a start-up, entirely business need driven on a cost-recovery basis, taking advantage of entrepreneurship best practices, catalyzing culture change through delivery of small wins, building confidence and trust in the new methods.

In Sep 2019, Sevgui was appointed as the Senior Director of the new Data Science Division, created to provide an R&D nucleus for the exploration and the application of data science within the Agency. The division deploys specialized multidisciplinary expertise in the latest open source, hardware and Cloud service techniques to tackle projects employing deep learning, NLP, image processing, homomorphic encryption, information retrieval and traceability methods.

Yvan Gauthier

Director of Data Science

Department of National Defence

Yvan Gauthier is a senior defence scientist with Defence R&D Canada – Centre for Operational Research and Analysis (DRDC CORA). Since 2017, he leads a data science team supporting the Chief Data Officer of the Department of National Defence (DND), a team now embedded with the Assistant Deputy Minister (Data, Innovation, Analytics) organisation. He also chairs the NATO Specialist Team SAS-150 on Advanced Analytics and AI for Enterprise Resource Planning. Before in his career, he has led several operational research projects while working with various branches of DND, including the Strategic Joint Staff, the Canadian Joint Operations Command, Maritime Forces Pacific Headquarters, and the Air Staff. He also worked for two years in the UK as an exchange scientist with Dstl Naval Systems.

FACULTY PROFILES

Mohammad Ghodratigohar

Data Scientist & AI Cloud Solution

Transport Canada

Mohammad Ghodratigohar is a Microsoft Azure certified cloud based big data scientist with years of hands-on experience in leveraging AI-driven in the application of machine learning and pattern classification techniques in computer vision, signal processing and geospatial big data analysis utilizing cloud resources in private and public sectors. Currently, he is contributing to the machine learning and data science portion of building Transport Canada's next generation big data AI platform on Microsoft Azure through designing and developing AI models and data engineering pipelines for big data/geospatial data all on cloud. Mohammad earned his Masters of Applied Science in biomedical engineering with specialization and journal publications of machine learning in healthcare from university of Ottawa in 2019.

Robin Grosset

Chief Technology Officer

Mindbridge AI

Robin joined MindBridge in July 2016 after an impressive tenure at IBM, where he was the Chief Architect of IBM Watson Analytics. Robin led the original product concept from inception to delivery. After rapid adoption, the product won the InfoWorld Technology of the Year award in 2016. Earlier in his career, Robin founded and served as Chief Technology Officer of Digital Aspects, which was later acquired by Cognos. Robin holds a B.Sc. in physics and computer science from Newcastle University.

FACULTY PROFILES

Maryam Haghighi

Director of Data Science

Bank of Canada

Dr. Maryam Haghighi is the Director of Data Science at the Bank of Canada. As the first-ever Director of Data Science for the nation's central bank, she provides strategic leadership related to data science, artificial intelligence, and machine learning applicable to macroeconomic and central banking to promote the economic and financial well being of Canada.

She has successfully led development across diverse teams from academic and research-oriented environments to global enterprises and private partnerships. With over 15 years of experience in a broad range of topics in advanced analytics and AI-driven innovation, she has overseen implementation of sophisticated solutions to complex data problems for multi-billion-dollar projects on the ground and in the skies.

Prior to joining the Bank, she pioneered the first ever space-based data analytics systems of a new satellite constellation. As Canada's delegate to international advisory panels, she provided data and modelling expertise for safety of global aviation and the betterment of lives of millions of Canadians.

Previously with the Government of Canada, she led the largest analytics project of the organization to-date, contributing to a highly successful multi-billion-dollar national program. Prior to that, she worked on safety risk management from a corporate perspective in healthcare. Earlier, as an executive of not-for-profit organizations, she was responsible for strategic resource planning and management of financial and human resources.

She holds a Ph.D. in Mathematics- Combinatorial Optimization and Operations Research from the University of Ottawa. She was a professor of mathematics and computer science courses and has been a technical consultant in multiple patent processes. She has a deep passion for interdisciplinary work and building bridges between advanced theories of mathematics and real-world applications as well as supporting women in technology initiatives.

Keith Jansa
Executive Director
CIO Strategy Council

Keith Jansa is the Executive Director of the CIO Strategy Council. He works with Canada's most forward-thinking public and private sector Chief Information Officers to collectively address the pace of digital transformation and advance Canada's position in the global digital economy. In his previous role as Vice President of Standards and Innovation, Keith led the CIO Strategy Council's standards setting activities and provided strategic leadership and insight on emerging technological trends and CIO Strategy Council-led initiatives.

Among his previous positions Keith led a team of specialists in a crown corporation devising many winning standardization strategies designed to accelerate market access for Canadian companies and their innovative technologies; managed a trade association standards program advancing strategic priorities in the interests of member companies and their customers; worked as a standards specialist for a leading standards development organization; and served as a board director for a non-profit organization providing strategic direction, overseeing financial reporting and enhancing the quality of life of those with mental health challenges. Keith holds a Bachelor in Health Sciences honours degree from the University of Ottawa. He is married to his university sweetheart, Kayla Jansa, and loves chasing after his 3 children.

FACULTY PROFILES

John Lark
Managing Principal
Coherent Advice Inc.

John Lark is an accomplished manager with broad experience in the management of staff, budgets and deliverables. He has managed research teams, chaired federal-provincial committees, and facilitated workshops at the Board level of large-scale organizations with domestic and international operations. He is a leader in risk management whose skills have been recognized internationally. He has worked with Canadian federal and provincial governments as well as the OECD, the US EPA, the Canadian Standards Association, the Risk Management Institution of Australasia and ISO, the International Organization for Standards. Mr. Lark has also been an invited speaker on Enterprise Risk Management, Operational Risk, Risk for Boards of Directors, and Internal Audit Control and convened an invited session of global leaders in risk management. He was awarded the global certification in risk management, CPRM in 2010.

He is a highly regarded global expert and has been an invited keynote speaker at international conferences in Washington D.C., Biel Switzerland and, Sydney, Canberra and Cairns Australia. Mr. Lark was one of Canada's delegates to the ISO risk management Committee and was a Team Leader of several ISO Working Groups and Subcommittees. Mr. Lark was the sole author of the international ISO Guide to implementing ISO 31000:2009 released in January of 2016.

Mr. Lark also has extensive Board experience and is Chair of two Not For Profit Boards and sits on the board of several major charities. He recently completed the Director's Education Program that is jointly offered by the Institute of Corporate Directors and the Rotman School of Management. After completing the course he successfully passed the qualifying exams and earned the ICD.D designation confirming his knowledge of Board obligations, structures and functions as well as all legal and regulatory obligations.

Somaieh Nikpoor
Research Advisor, Labour Program
Government of Canada

Somaieh Nikpoor is a research advisor at Labour Program. She is experimenting with machine learning models to explore whether these models could be used to improve service delivery. She enjoys turning data into numbers, numbers into words, words into stories and stories into action for her clients. She started her professional career on the Economics PhD track. With an undergraduate background in mathematical economics, she started getting interested in programming and less interested in abstract academic research. She loves starting projects from scratch, working with clients to identify their business problems, strategizing analytic approaches, creating models using machine learning models and operationalizing these models to truly drive behavior and improve decision making. Prior to joining the Labour Program, Somaieh was a data analyst at Advanced Analytics Lab residing in the Federal Government of Canada. Somaieh holds a Ph.D. in economics from the University of Ottawa. She is AI ethics stream owner at Aggregate Intellect, working on curating and generating original content that will help others navigate through AI ethics topics and concept.

FACULTY PROFILES

Gemma Sim

Program Manager, myDurham311, Corporate Services, Information Technology

Regional Municipality of Durham

Gemma Sim is Program Manager for the Regional Municipality of Durham's myDurham 311 program. In this role she is responsible for managing the program that will transition the Region towards a 311 Contact Centre model. With more than 15 years experience in the public sector, Gemma leads projects specializing in the technology supporting customer service strategy and strategic planning. Gemma holds a MSc from Glasgow's Strathclyde University, certification in Public Sector Leadership from the Chartered Management Institute, and Project Management Professional designation from the Project Management Institute.

Ronald Stroup

General Engineer Expert, NAS Enterprise Planning and Analysis

Federal Aviation Administration

Mr. Stroup is a recognized expert within the FAA providing systems engineering leadership for highly complex and challenging activities in the air transportation field. Mr. Stroup has served in multiple positions with the FAA over his 30 years, which include Chief Systems Engineer (CSE) for Airborne and Ground Integration; as an Aviation Safety Engineer and Software Technology Specialist in Aircraft Certification offices; and as a Computer Scientist for the Chief Scientist for NAS Software. Currently, Mr. Stroup leads the application of AI/ML technologies in the future NAS. He provides technical leadership in the investigation of AI/ML technologies as it affects the evolution of the NAS.