



VECTOR  
INSTITUTE

# AI Master's Summit & Career Fair

September 19th 2019 | 10am to 3:30pm  
Design Exchange, Toronto

# AGENDA



10:00 am

## Opening Remarks & Acknowledgement of Scholarship Recipients

Dr. Garth Gibson, President & CEO, Vector Institute

10:15 am

## Keynote Presentations

Reflecting on their own career journeys, Marcus Brubaker and Sheila McIlraith offer thoughtful insights on some of the issues, challenges and opportunities in AI and what they mean for master's graduates entering a rapidly changing and dynamic workforce. Marcus Brubaker explores some of the lessons learned through his experiences applying AI techniques to problems outside of traditional spheres. Sheila McIlraith unpacks the complexity of decision making and the implications it has on responsible AI.

### Having Impact with AI

Marcus Brubaker, Faculty Affiliate, Vector Institute; Research Director, Borealis AI; Assistant Professor, Department of Electrical Engineering and Computer Science, York University

### Doing the Right Thing:

### And Getting your AI to do the Same

Sheila McIlraith, Faculty Member, Vector Institute; Professor, Department of Computer Science, University of Toronto

11:00 am

## Networking Coffee Break

11:30 am

## Industry Panel Discussion: Careers in AI

Explore the dynamics of working in AI across a range of industries and learn more about the career paths of these highly experienced individuals as they share their insights and advice for students joining the AI workforce. Panel moderated by Melissa Judd, Director, Academic Partnerships, Vector Institute. Panelists include:

Mike Cloutier, Canada Chief Data Scientist, Accenture  
Peter Danforth, Vice President, Data Science, Loblaw  
Steve Kludt, Chief Technology Officer & Founding Partner, Canvass Analytics  
Stephany Lapierre, CEO, Tealbook  
Reuben Pereira, Data Scientist, Air Canada

12:30 pm  
- 3:30 pm

## Networking Lunch & Career Fair

Enjoy an afternoon of conversation across two floors. You will be designated a floor to begin your networking and career exploration as the afternoon begins and will have the opportunity to spend time on each floor connecting with industry sponsors and master's students from across Ontario. Don't forget to complete your Vector passport to be entered into a draw to win two complimentary tickets to the Evolution of Deep Learning Symposium & Banquet in Honour of Dr. Geoffrey Hinton on October 17th, 2019.

## SPEAKERS



## Dr. Garth Gibson

### President & CEO, Vector Institute

Dr. Gibson returned to Canada in January 2018 as the Vector Institute's first President and CEO. The Vector Institute's mandate is to drive excellence and leadership in Canada's knowledge, creation, and use of AI to foster economic growth and improve the lives of Canadians. Prior to that he served in many leadership positions with Carnegie Mellon University (CMU) in Pittsburgh where he was Professor in the Department of Computer Science and the Department of Electrical and Computer Engineering, Co-Director of its Master of Computational Data Science program, and Associate Dean for Master's Programs in the School of Computer Science. CMU's Parallel Data Lab, co-created by Dr. Gibson over 25 years ago, continues to enable researchers and industry to collaborate on technology directions. He is recognized for his early contributions to Redundant Arrays of Inexpensive Disks (RAID) technology and now publishes and gives talks on bridging high-performance computing, artificial intelligence and machine learning. Dr. Gibson was raised in Aurora, Ontario and has a B. Math (University of Waterloo), MSc and PhD (University of California, Berkeley). He is a Fellow of the Association of Computing Machinery and a Fellow of the Institute of Electrical and Electronics Engineers.



## Marcus Brubaker

### Faculty Affiliate, Vector Institute; Research Director, Borealis AI; Assistant Professor, Department of Electrical Engineering and Computer Science, York University

Marcus Brubaker is Research Director of Borealis AI's Toronto and Waterloo research centers. He is also Assistant Professor of Computer Science at York University, Adjunct Professor in the University of Toronto Department of Computer Science and a Vector Faculty Affiliate. Originally from the United States, he moved to Canada in 2001 to study at the University of Toronto where he received his PhD in 2011. He did postdocs at the Toyota Technological Institute in Chicago, Toronto Rehabilitation Hospital and the University of Toronto. His research interests span computer vision, machine learning and statistics. He's also the co-founder of Structura Biotechnology and has worked in a number of startups prior to joining Borealis.



## Sheila McIlraith

Faculty Member, Vector Institute;  
Professor, Department of Computer  
Science, University of Toronto

Sheila McIlraith is a Professor in the Department of Computer Science, University of Toronto. Prior to joining U of T in 2004, McIlraith spent six years as a Research Scientist at Stanford University, and one year at Xerox PARC. McIlraith is the author of over 100 scholarly publications in the area of knowledge representation and automated reasoning, and in particular automated plan generation and sequential decision making. She is currently serving as Past-President of KR Inc., the international scientific foundation concerned with fostering research and communication on knowledge representation and reasoning. McIlraith is a fellow of the Association for the Advancement of Artificial Intelligence (AAAI), associate editor of the Journal of Artificial Intelligence Research (JAIR), serves on the editorial board of Artificial Intelligence Magazine, and is a past associate editor of the journal Artificial Intelligence (AIJ). She was recently program co-chair of the 32nd AAAI Conference on Artificial Intelligence (AAAI-18), and is past program co-chair of the 13th International Conference on Principles of Knowledge Representation and Reasoning (KR2012), and the International Semantic Web Conference (ISWC2004). McIlraith's early work on Semantic Web Services has had notable impact. In 2011 she and her co-authors were honoured with the SWSA 10-year Award, recognizing the highest impact paper from the International Semantic Web Conference, 10 years prior. Her research has also made practical contributions to the development of next-generation NASA space systems and to emerging Web standards.



## Mike Cloutier

Canada Chief Data Scientist,  
Accenture Canada

Mike is a seasoned Data Science practitioner, and throughout his career he has both advised and built complex applications delivering and creating business value for clients, leveraging evolving technologies across advanced analytics, machine learning and deep learning.

The experience is cross-industry, with a specialization in life science, pharmaceuticals and healthcare, and he was most recently with IQVIA leading their Data Science practice. Additionally, Mike has uniquely led clients through the emerging space of big-data driven litigation related to intellectual property, finance and antitrust. Mike is an industry-recognized thought leader, having authored a wealth of material on advanced analytics and artificial intelligence, and led both executive and practitioner capability development programs in this field.

He holds a Bachelor's degree in Mathematics & Economics from University of Montreal, a Master in Economics from University of Montreal, and a Ph.D. in Economics from Queen's University.



## **Peter Danforth** Vice President, Data Science, Loblaw

Peter Danforth is the Vice President, Data Science at Loblaw Company Limited. Peter runs a team of enterprise data scientists responsible for functional areas ranging from store operations to 1:1 marketing. Prior to that Peter worked on the design of multiple Canadian loyalty programs in the FI and retail verticals. His background in both applied mathematics and economics have allowed him to leverage emerging technologies and concepts in advanced analytics to solve complicated problems.



## **Steve Kludt** Chief Technology Officer & Founding Partner, Canvass Analytics

Steve Kludt is the CTO and founding partner at Canvass Analytics. In his role, Steve is responsible for developing technologies that power the Canvass Platform uncovering new approaches to predictive analytics. Steve leads the research and development team digging deeper into Industrial Big Data to discover emerging automated data modeling methods powered by artificial intelligence.

Prior to co-founding Canvass Analytics, Steve lead the industrial predictive data models for energy and asset optimization at NorthWestern Energy (U.S.). He boasts over 15 years of extensive experience in software engineering and data analysis and is an active member of Toronto's vibrant tech startup community.



## Stephany Lapierre

### CEO, Tealbook

Stephany Lapierre is the Founder and CEO of Tealbook. She has won several awards for her innovative approach to leveraging supplier intelligence and has received repeated recognition as a female tech entrepreneur. After studying the business impact of costly and inefficient gaps between enterprise buyers and suppliers, she launched Tealbook as the largest, most robust and trusted B2B network. Her vision is for Tealbook to upgrade the application of supplier information through machine learning, efficiently increasing innovation and value creation for all parties. Prior to Tealbook, Stephany built a successful procurement consulting firm focused on helping Fortune 500 companies improve strategic sourcing efficiencies.



## Reuben Pereira

### Data Scientist, AI, Air Canada

Reuben is an experienced data scientist currently playing the role of a delivery lead on several AI related initiatives at Air Canada. Before joining Air Canada, Reuben was a senior data scientist at Deloitte and the lead data scientist at CarFax Canada. Before joining the industry, he spent 2 years researching novel Bayesian inference techniques (INLA) for spatio-temporal statistical models at Cancer Care Ontario. He holds a BSc in Statistics and a MSc in Biostatistics, both from the University of Toronto. He is currently also a lead instructor for the data science and machine learning programs at Brainstation.

# COMPANIES



**Organization Name:** Accenture

**Sector:** Consulting

**Positions Available:** Full-Time

**Types of Open Positions Available:** Data Analyst, Data Architect, Data Engineer, Data Scientist, Machine Learning Engineer, Research Scientist, Software Engineer

**Programs Preferred:** Applied Computing, Computer Science, Data Science, Statistics, Systems Design

## **Description of How AI is Used at Accenture:**

Artificial intelligence is the talk of the town. And while AI can be a game-changing technology, it isn't a "silver-bullet" solution as some would suggest. Rather, we believe real digital transformation happens when we combine AI with analytics, automation, and a bold vision on how to apply these technologies together at scale. That's what the Applied Intelligence approach is all about.

We help you collect, interpret and enhance data that may have been previously hidden or out of reach, generating near real-time insights. Our cross-disciplinary teams of industry-specific experts use this intelligence to discover new opportunities and reimagine your products and services, opening up new revenue streams. At the same time, we create policies and processes that ensure AI is responsible and benefits all parties impacted – all while ensuring innovation isn't hampered. And we make sure to empower and train your people to work alongside these technologies to make faster, more informed decisions that are less transactional and more strategic. While we have proven, ready-to-go industrialized solutions, we know that no two clients are alike. Therefore, our team of more than 6,000 experts in AI and data science spanning over 125 countries will customize the right solutions for your needs. Our flexibility to work with almost any technology partner also allows us to help you get the most out of your existing analytics and AI investments.



**Organization Name:** BMO Financial Group

**Sector:** Financial Services

**Positions Available:** Full-Time, Internships

**Types of Open Positions Available:** Data Engineer, Data Scientist, Machine Learning Engineer

**Programs Preferred:** Business Analytics/ Management Analytics, Computer Science, Data Science, Electrical and Computer Engineering, Management in Artificial Intelligence

## **Description of AI at BMO Financial Group:**

BMO is a leading bank driven by a single purpose: to Boldly Grow the Good, in Business and Life. Every day, we continue to set our sights higher, inspired by our purpose and energized by the opportunity to create positive change for the customers and communities we serve. At our core, we're builders – proud to be fueling growth and expanding possibilities for individuals, families and businesses. More than 12 million customers count on us for personal and commercial banking, wealth management and investment services. As the 8th largest bank, by assets, in North America, we help our customers make money make sense.

In Canada, in the United States and across the globe, we'll continue to build, invest and transform to drive performance that serves the good that grows. And, we power our business growth with the use of Data, Analytics & AI with which we have realized significant value. From applied machine learning to intelligent process automation, we offer challenging business and technical problems to stimulate our teams, drive productivity and accelerate our strategic business growth in a fair, transparent, accountable and explainable manner.

As we expand the adoption of AI across BMO, our BMO Forward and BMO U learning programs offers training at various competency levels – basic, intermediate and advanced - in partnership with external organizations where needed.





**Name of Organization:** Borealis AI

**Sector:** FinTech

**Positions Available:** Full-Time, Internships

**Types of Open Positions Available:** Data Engineer, Machine Learning Engineer, Research Scientist

**Programs Preferred:** Computer Science, Electrical & Computer Engineering, Statistics

**Description of AI at Borealis AI:**

Borealis AI is a team of researchers and developers dedicated to solving today's leading problems in machine learning and artificial intelligence. Our researchers are dedicated to pushing the boundaries of theoretical and applied science, while our development team transforms state-of-the-art technologies and algorithms into impactful products with the potential to reach millions of people.

As a Machine Learning Researcher, you are looking to channel your love of playing with real-world data into industry-disrupting solutions. We are a lab that supports research on a wide variety of theoretical and applied machine learning projects. Working in our lab will grant you unique access to massive structured and unstructured datasets with the tools and resources necessary to build game-changing statistical models.

As a Machine Learning Software Developer, you will be at the forefront of machine learning technology, and working on extremely challenging problems. In particular, you will be responsible for owning and delivering a project end to end – everything from literature review and data pre-processing to implementing machine learning algorithms and front-end development.

At Borealis AI, you'll be joining a team that works directly with leading researchers and engineers in machine learning, has access to rich and massive datasets, and offers the computational resources to support ongoing development in areas such as reinforcement learning, unsupervised learning and computer vision. You can find out more about our research areas at borealisai.



**Name of Organization:** Loblaw Companies Limited

**Sector:** Retail

**Positions Available:** Full-Time, Internships

**Types of Open Positions Available:** Data Analyst, Data Architect, Data Engineer, Data Scientist, Machine Learning Engineer, Research Scientist, Software Engineer

**Programs Preferred:** Business Analytics/Management Analytics, Computer Science, Data Science, Electrical & Computer Engineering, Health Informatics, Management in Artificial Intelligence, Mechanical & Industrial Engineering, Statistics

**Description of AI at Loblaw Companies Limited:**

Canada's food and pharmacy leader, with a network of corporate and independently-operated stores in communities across the country, and employing close to 200,000 Canadians. Loblaw's purpose – Live Life Well – supports the needs and well-being of Canadians who make one billion visits each year to the company's stores. Loblaw is positioned to meet and exceed those needs in many ways: convenient locations that span the value spectrum from discount to specialty; full-service pharmacies; no-fee banking; affordable fashion and family apparel; and, three of Canada's top consumer brands in President's Choice®, Life Brand®, and no name®. The newly created Data, Insights and Analytics team is a rapidly growing part of our business. We are focused on delivering meaningful and actionable insights that puts our passion for customers at the center. This is an exciting time to join our team – we are changing the game in a big way!





**Name of Organization:** Scotiabank

**Sector:** Financial Services

**Positions Available:** Full-Time, Internships

**Types of Open Positions Available:** Data Analyst, Data Architect, Data Engineer, Data Scientist, Machine Learning Engineer, Research Scientist, Software Engineer

**Programs Preferred:** Applied Computing, Business Analytics/Management Analytics, Computer Science, Data Science, Statistics

**Description of AI at Scotiabank:**

When change is a constant, you need the brightest minds – not just to keep up – but to stay ahead. At Scotiabank, we're looking for creators, problem solvers, and technical minds to bring their subject matter expertise to fuel our transformation. Reinvention starts here — and it starts with you. We work fast, and we work smart. Join us to create meaningful experiences and build the bank of tomorrow for our customers around the world. You may not know what the future has in store, but it definitely helps to have a roadmap (and a good sense of direction):

- We're an internationally-recognized and award-winning workplace
- We're always on the lookout for fresh thinking and unique skills
- Our employees are rewarded for their contributions
- We're driven by core values that put our people first
- We're performance-based and driven to succeed



**Name of Organization:** TD Bank & Layer 6 AI

**Sector:** Financial Services

**Positions Available:** Full-Time

**Types of Open Positions Available:** Business Analyst, Data Architect, Data Engineer, Data Scientist, Machine Learning Engineer, Research Scientist, Software Engineer

**Programs Preferred:** Applied Computing, Business Analytics/Management Analytics, Computer Science, Data Science, Management in Artificial Intelligence, Statistics, Systems Design

**Description of AI at TD Bank/Layer 6 AI :**

Data and Analytics empowers TD Bank to drive value from data to develop deeper relationships and deliver more personalized experiences for our customers. The recent acquisition of global Artificial Intelligence leader, Layer 6 AI, demonstrates how TD is committed to innovating with purpose. By connecting the talent and capability of Layer 6 with our digital, data and technology ecosystem, we are well positioned to accelerate our journey to becoming The Bank of the Future.



**Name of Organization:** Thomson Reuters

**Sector:** Professional Services and Media

**Positions Available:** Full-Time, Internships

**Types of Open Positions Available:** Data Scientist, Machine Learning Engineer, Research Scientist, Software Engineer

**Programs Preferred:** Computer Science, Data Science, Statistics

**Description of AI at Thomson Reuters:**

The Thomson Reuters Center for AI and Cognitive Computing is the research center for Thomson Reuters supporting products in the law, tax and news domains. We work on difficult problems that make a real difference in some of the most important industries in society. We focus on problems such as language understanding, legal decision support and search. We develop industry leading AI solutions using a wide variety of techniques drawn from traditional AI, statistical machine learning, deep learning and more. This is a great place to be challenged by hard problems that have a meaningful impact.

# Uber ATG

**Name of Organization:** Uber ATG

**Sector:** Technology

**Positions Available:** Full-Time, Internships

**Types of Open Positions Available:** Machine Learning, Research Engineer

**Programs Preferred:** Computer Science

**Description of AI at Uber ATG :**

Uber ATG is comprised of Uber's self-driving team dedicated to self-driving technologies, mapping, and vehicle safety. Our teams are passionate about developing long-term technologies that advance Uber's mission of bringing safe, reliable transportation to everyone, everywhere. Uber ATG in Toronto is home to our Research & Development team that focuses on cutting-edge research for self-driving cars in broad areas of computer vision, machine learning, and robotics, publishing our findings in top conferences and journals.

At Uber, we believe technology has the power to make transportation more efficient, accessible, and safer than ever before. Self-driving technology has the potential to make these benefits an everyday reality for our customers, but it's not going to happen overnight. Building best-in-class self-driving technology will take time, and safety is our priority every step of the way. Operating inclusively and transparently, while displaying responsible behaviour in a structured development are critical to safety. We at ATG seek candidates who will role model these values. We are a group of diverse researchers, engineers, and computer scientists working to develop perception algorithms for self-driving vehicles. Reliability and scalability are key drivers for us as our software must perform across a large fleet of vehicles in large and diverse operating areas.

For more information about our R&D team, please visit our webpage: <https://www.uber.com/us/en/atg/research-and-development/>



**Name of Organization:** Air Canada

**Sector:** Aviation

**Positions Available:** Full-Time, Internships

**Types of Open Positions Available:** Data Architect, Data Engineer, Data Scientist, Machine Learning Engineer, Software Engineer

**Programs Preferred:** Applied Computing, Computer Science, Data Science, Electrical & Computer Engineering, Statistics

**Description of AI at Air Canada:**

Air Canada is the flag carrier and the largest airline of Canada by fleet size and passengers carried. The airline, founded in 1937, provides scheduled and charter air transport for passengers and cargo to 207 destinations worldwide. It is a founding member of the Star Alliance.

Air Canada's ambition is to become Canada's AI employer of choice within three years, and within five years, Air Canada plans to leverage AI throughout the organization to ensure competitive advantage within the global airline industry.

As a starting point, Air Canada has formed an AI Centre of Expertise (CoE), comprised of business leaders, data scientists, and data engineers who collaborate closely with universities and researchers. This will help Air Canada deliver on their strategic roadmap and become one of the most proactive and ambitious adopters of AI in Canada. Along with introducing AI Labs across the company, part of the CoE's role is to introduce new ways of thinking about traditional problems.



**Name of Organization:** Deloitte

**Sector:** Professional Services

**Positions Available:** Full-Time, Internships

**Types of Open Positions Available:** Data Engineer, Data Scientist, Machine Learning Engineer, Software Engineer, Developer, Consultant

**Programs Preferred:** Applied Computing, Business Analytics/Management Analytics, Computer Science, Data Science, Electrical & Computer Engineering, Management in Artificial Intelligence, Mechanical & Industrial Engineering, Systems Design

**Description of AI at Deloitte:**

"Deloitte" is the brand under which tens of thousands of dedicated professionals in independent firms throughout the world collaborate to provide audit, consulting, financial advisory, risk management, tax, and related services to select clients. Deloitte's artificial intelligence practice leads all others in starting, enabling, accelerating, and sustaining the AI journey. We believe AI has the power to improve Canadian organizations in transformative ways.



**Name of Organization:** EY

**Sector:** Professional Services (All Sectors)

**Positions Available:** Full-Time, Internships

**Types of Open Positions Available:** Data Analyst, Data Architect, Data Engineer, Data Scientist, Machine Learning Engineer, Research Scientist, Software Engineer

**Programs Preferred:** Applied Computing, Bioinformatics, Business Analytics/Management Analytics, Computer Science, Data Science, Electrical & Computer Engineering, Health Informatics, Management in Artificial Intelligence, Mechanical & Industrial Engineering, Statistics, Systems Design

#### **Description of How AI is Used at EY:**

EY's employees are located in more than 150 countries. They are committed to operating with integrity, quality, and professionalism in the provision of Advisory, audit, tax, and transaction services. We strive to help our team members achieve their professional and personal goals through an inclusive environment that values everyone's contributions, appreciates diversity of thought, fosters growth, and provides continuous opportunities for development. Recognized as one of Canada's top employers, EY continually strives to be a great place to work.

EY Canada and our EY Global Artificial Intelligence Practice are helping our clients solve many problems across various disciplines. EY Canada has a holistic approach to AI. We are helping organizations establish the governance, processes and systems to build and maintain trust, anchoring to the five core principles below, which maximize economic gain while also managing for business and social risks while implementing AI. Our AI Approach is:

- **Holistic:** Consider the full-spectrum of Artificial Intelligence, Machine learning, intelligent, robotic and automated options, and impacts, from day one
- **Human-centered:** Prioritize making people's jobs easier and simpler, maximizing human performance
- **Outcomes – Focused:** Do not relentlessly automate, blend human and machine capabilities to optimize business value
- **Pragmatic:** Objectively assess readiness, investments, risks, and benefits, balancing enthusiasm with reality
- **Ethical:** Design and govern systems to be auditable, explainable, inclusive, incorruptible and beneficial



**Name of Organization:** Intact Financial Corporation

**Sector:** Property and Casualty Insurance

**Positions Available:** Full-Time, Internships

**Types of Open Positions Available:** Data Scientist, Software Engineer

**Programs Preferred:** Applied Computing, Business Analytics/Management Analytics, Computer Science, Data Science, Electrical & Computer Engineering, Management in Artificial Intelligence, Mechanical & Industrial Engineering, Statistics

#### **Description of AI at Intact:**

From coast to coast, one in five Canadians count on Intact to protect what matters most to them. As the largest provider of property and casualty (P&C) insurance in Canada and a leading provider of specialty insurance in North America, they are steering the industry towards an exciting future. Along with the advances Intact is making with insurance technology and digital tools, they're building partnerships that are defining: the future of transportation; how we use big data; how people interact with their homes, cars and environment; and how to be collaborative consumers within the sharing economy. Above all, Intact is focused on providing a customer experience that is second-to-none. While their Claims teams are focused on getting customers back on track after a loss, teams like the Intact Lab - Data Science are busy leveraging modern technology and machine-learning (A.I.) to transform the customer experience.



**Name of Organization:** KPMG

**Sector:** Professional Services, Technology

**Positions Available:** Full-Time, Internships

**Types of Open Positions Available:** Data Engineer, Data Scientist, Machine Learning Engineer, Software Engineer

**Programs Preferred:** Applied Computing, Business Analytics/Management Analytics, Computer Science, Data Science, Electrical & Computer Engineering, Management in Artificial Intelligence, Statistics, Systems Design

**Description of AI at KPMG:**

Innovate. Collaborate. Shine. Lighthouse - KPMG Canada's Center of Excellence for Data & Analytics + Intelligent Automation - applies data science to solve real-world business problems and operationalize AI. Join a diverse team which is always curious and learning, thinking independently and working collaboratively, has a passion to solve difficult problems and has fun doing it.



**Name of Organization:** PwC Canada

**Sector:** Consulting

**Positions Available:** Full-Time, Part-Time, Internships

**Types of Open Positions Available:** Data Architect, Data Engineer, Data Scientist, Machine Learning Engineer

**Programs Preferred:** Applied Computing, Business Analytics/Management Analytics, Computer Science, Data Science, Management in Artificial Intelligence

**Description of How AI is Used at PwC Canada:**

Our team offers recent graduates with the opportunity to work on large and groundbreaking projects, access enhanced training and development opportunities, collaborate across the firm and be part of the decision-making processes within our practice.

In Canada, PricewaterhouseCoopers (PwC) has more than 110 years of excellence. And as part of a global network of more than 250,000 staff in 158 countries we provide exceptional service to our clients. We are consistently working to provide the best of our collective thinking and solutions to enhance value for our clients and their stakeholders.

These values are demonstrated within our One Analytics practice; a unique experiential structure that brings together professionals with a diverse set of skills and experiences from across each of our lines of service - Tax, Consulting, Deals and Assurance - to provide our clients with advanced analytics solutions.

We work closely with clients to gain a deeper understanding of their issues. Our solutions use artificial intelligence (AI), machine learning (ML), robotic process automation (RPA), advanced analytics and developing our own models to deliver insights that give our clients a competitive advantage, improve their decision making and capitalize on untapped business intelligence. We help our clients control costs within millions. Pertaining to AI and ML, we help our clients understand and manage risks by incorporating responsible and ethical frameworks into design, development and deployment of solutions.

Our clients are looking for innovative solutions to solve their business issues, make better decisions and grow revenue.



**Name of Organization:** Sun Life Financial

**Sector:** Insurance and Financial Services

**Positions Available:** Full-Time

**Types of Open Positions Available:** Data Analyst, Data Engineer, Data Scientist, Machine Learning Engineer, Research Scientist

**Programs Preferred:** Business Analytics/Management Analytics, Computer Science, Data Science, Management in Artificial Intelligence

#### **Description of AI at Sun Life Financial:**

Sun Life Financial is in the business of helping our Clients achieve lifetime financial security and live healthier lives. Founded in Canada in 1865, Sun Life has been a trusted name for generations. Today, Sun Life serves millions of Clients in Canada, the United States, Asia, the U.K. and other parts of the world. Our range of protection and wealth management businesses supports our continued growth and a bright future ahead.

We believe diversity is the foundation for understanding the needs of our Clients. Our inclusive culture empowers employees to bring their whole selves to work and contribute to their full potential. We care about the mental, physical and financial well-being of our employees by providing progressive reward programs.

We aim to make life brighter for our colleagues, Clients and communities globally. We are proud to be recognized year-after-year as one of the world's most sustainable organizations. With our philanthropic focus on arts, culture and health, we're dedicated to making the arts more accessible and to our signature cause, the prevention of type 2 diabetes.

If you're looking for an energetic organization that's committed to employee development and best-in-class client experiences, rise up with Sun Life.

Life's brighter under the sun.



**Name of Organization:** Thales Canada Inc.

**Sector:** Technology

**Positions Available:** Full-Time, Internships

**Types of Open Positions Available:** Data Analyst, Data Architect, Data Engineer, Data Scientist, Machine Learning Engineer, Research Scientist, Software Engineer

**Programs Preferred:** Aerospace Studies, Applied Computing, Business Analytics/Management Analytics, Computer Science, Data Science, Electrical & Computer Engineering, Management in Artificial Intelligence, Mechanical & Industrial Engineering, Statistics, Systems Design

#### **Description of AI at Thales:**

In fast changing markets, customers worldwide rely on Thales. Thales is a business where brilliant people from all over the world come together to share ideas and inspire each other. In Aerospace, Transportation, Defence and Security space, our architects design innovative solutions that make our tomorrow's possible.

Our research and technology (R&T) team in Toronto brings knowledge in Robotics, Computer Vision, Fusion Algorithms, Point Cloud Processing and Machine Learning to build, test and review next generation solutions for the transit market. They are involved in research and development to create "proof-of-concept" products for the Urban Rail Signalling domain.

A world leading AI Hub in Montreal is home to new Centre of Research & Technology in Artificial Intelligence eXpertise (cortAix) collaborating with leading Canadian AI research groups in Montreal and Toronto. With competencies in major industrial markets, Thales is bringing Artificial Intelligence to life for our customers creating exciting jobs for AI researchers and developers who will create solutions that will transform our world from the bottom of oceans to the depths of space and cyberspace. As an early adopter of open, creative and collaborative innovation model, Thales is building the Centre of Research and Technology in Artificial Intelligence eXpertise (cortAix). Led by Thales, cortAix, in collaboration with the MILA (Artificial Intelligence Institute of Quebec), the IVADO (Institute of Data Valorization) and the Vector Institute of Toronto, will be located in Montreal's famous Little Italy, in the heart of Montreal's innovation community.

# CANVASS

**Name of Organization:** Canvass Analytics

**Sector:** Manufacturing

**Positions Available:** Full-Time, Internships

**Types of Open Positions Available:** Data Engineer, Data Scientist, Machine Learning Engineer, Software Engineer

**Programs Preferred:** Data Science, Mechanical & Industrial Engineering

## Description of AI at Canvass Analytics:

Canvass Analytics is at the forefront of helping industrial companies transform their operations using AI. Our customers include some of the world's largest food and agriculture, metals and mining, and energy companies that are utilizing the Canvass AI Platform to reduce costs, increase productivity and improve energy efficiency.

The breakthroughs we're achieving are recognized by the industry's leading awards including Network World's Hot AI-Powered IoT Startups, CIX Top 20 Most Innovative Canadian Company and Microsoft's Great Canadian Innovators Yearbook. We're scaling up across the globe and are always looking for ambitious, creative innovators to join our dynamic team.



**Name of Organization:** Surgical Safety Technologies

**Sector:** Healthcare

**Positions Available:** Full-Time, Part-Time, Internships

**Types of Open Positions Available:** Data Analyst, Data Architect, Data Engineer, Machine Learning Engineer

**Programs Preferred:** Computer Science, Data Science, Health Informatics

## Description of AI at Surgical Safety Technologies:

Surgical Safety Technologies (SST) and our academic research group, the International Centre for Surgical Safety (ICSS), affiliated with St. Michael's Hospital, are collectively accelerating the advancement and global adoption of the Operating Room Black Box. OR Black Box® is an innovative, unique platform that allows healthcare professionals to identify, understand and mitigate risks that impact patient safety. At Surgical Safety Technologies, our mission is to improve patient outcomes with research proven advanced technological solutions. Currently the platform has been implemented in a number of hospitals in Canada, USA, and Europe, with global clinical data analysis and insight generation centralized at our corporate offices, co-located within St. Michael's Hospital.



### Stay tuned for more information on:

- The Fields Institute Machine Learning Advances and Applications Seminar series, which strengthens the machine learning community in Ontario by bringing together researchers from both academia and industry to discuss advanced topics in machine learning.
- Health AI Rounds, a series featuring leading international health researchers that connects the health research and AI communities and seeds new collaborations.
- Vector's next Careers in AI Panel and connect first hand with professionals who are at the forefront of AI across a range of industries that are hiring AI talent.



**@VectorInst**  
**#AINORTH**



**Vector Institute**