Career Event 2021

Careers Outside Academia

Wednesday, March 3, 2021
5:00-6:30pm

Speaker Bios

Ginelle Johnston
Manager - A220 Maintenance Engineering, Airbus
BASc Engineering Physic (Queens)
MSc Quantum Optics (UofT)

After completing her MSC in Quantum optics working under Aephraim Steinberg in 2014, Ginelle joined Bombardier Aerospace as an aircraft economics analyst during the final months before the launch of a brand new aircraft the CSeries. After 3 years, during an Acquisition by Airbus in 2018, she was asked to rebuild the team as a supervisor for fleet performance of what would become rebranded the A220. Shortly after she was promoted to run the three teams within her department of maintenance engineering. Analytics and data is at the forefront of Ginelle's role in aerospace. With one of her three teams completely dedicated to data management for aircraft operational performance analytics, and the other two changing the way data plays a role in aircraft maintenance. Some key accomplishments of her teams include launching AI algorithms to automate data processing, deploying a new analytics framework for aircraft maintenance, and driving aircraft performance improvement through a data first approach. She attributes a large amount of her success in the industry to the perspectives she gained through studies in physics including the importance of having a statistical intuition.

Eisha Patel
Data Scientist, Bell Canada
BSc Physics and Mathematics (U of T)
MSc Data Sciences (Ryerson)

My name is Eisha Patel and I am Data Scientist in the Network Big Data Team at Bell Canada.

I started my journey in 2012 at the University of Toronto studying Physics. I was extremely fascinated by Physics and even considered pursuing a Ph.D. in Quantum Computing.

But upon graduation, I realized that Physics was not really my calling. I wanted to see myself in the industry working for a reputable company doing something that's both intellectually challenging and financially sustainable. At the time, I heard a lot of buzz about Big Data and Machine Learning becoming a trend and Data Scientists were becoming highly demandable in the industry. To get a better understanding of what the 'buzz' was all about, I enrolled in a certification program for Big Data and Predictive Analytics at Chang School Ryerson. That's when I realized that I finally found my calling! The following year I enrolled in the Data Science Masters at Ryerson and completed my degree in 2019. Today I work as a full-time Data Scientist, creating forecasting models to predict network usage trends. I'd say I found my ideal balance of work and passion!

Eric Sjerve
Chief Technology Officer, IRISNDT
Bsc Physics (UBC)
PhD Applied Laser Physics (U of T)

Eric Sjerve received a Ph.D. in Applied Laser Physics from the University of Toronto (1996), and he joined the NDT industry over 20 years ago. He serves as Chief Technology Officer for IRISNDT, an international non-destructive testing, engineering, heat treating and mechanical services company. Eric's role at IRISNDT is to drive innovation through internal projects, partnering with external organizations and company acquisitions.

Eric has been transformative commercializing NDT innovations, but also with combining NDT, engineering, robotics and information technology. Through his International Institute of Welding (IIW) work and other activities, he has led, or been part of groups that have published five books, four ISO standards, presented three keynote addresses and given over 50 conference presentations. Eric has Chaired international groups at the IIW, in inspection and maintenance robotics, and at ISO.

Andrea Vargas
Systems Test Specialist, Synaptive Medical Inc.
HBSC Physics (U of T)
MSc Medical Biophysics (U of T)

Andrea completed a Physics specialist at U of T. During this time, she took on research projects in planetary physics with Dr. Sabine Stanley and in bioinformatics at the Ontario Institute for Cancer Research (OICR). These projects led her into pursuing graduate studies at the Department of Medical Biophysics. Her Master's thesis specialized in improving Magnetic Resonance Imaging methods by reducing imaging time and increasing the contrast of tissues. Knowing that MRI is a technology of great potential she decided to continue her career in the medical technology industry. Andrea works at Synaptive Medical Inc., a medical technology company specialized in offering solutions for neurosurgery and the emergency room. These solutions include cutting-edge software to improve neurosurgical planning by visualizing whole brain tractography and a point-of-care MRI. In her role as a system test specialist, she performs exploratory testing and works closely with development teams to design, verification and validation test protocols.