Where are you from? (State, city, high school)

I was raised in a small town in Northern New Hampshire called Bethlehem. Growing up, I went to school in St. Johnsbury, Vermont.

Where did you do your ungrad studies?

Rochester Institute of Technology.

Why did you choose the UdeM? And Montreal?

The University of Montreal is a beacon for machine learning research. I strongly support their commitment to ethical applications of technology. Recently, UdeM organized the Forum IA Responsable, which brought together ethicists and computer scientists to help raise awareness for responsible uses of AI and machine learning. Developing technology that benefits society is an important part of UdeM's mission, and Montreal is a socially conscious and very friendly place to live. Studying at UdeM was an easy choice.

Where did you learn French? It is important to learn French in order to live in Montreal? Do you enjoy living in Montreal? Why?

I started learning French in grammar school. We had many good teachers, but to learn a language well, you really need immersion. Knowing French is not a requirement for moving to Montreal, but it certainly makes life easier. If you are willing to learn another language, then studying in Montreal can be a very rewarding experience, and UdeM has several classes for newcomers and Intermediate French speakers.

Montreal is a very lively city, and offers a number of opportunities for work, study and recreation. It has world-class civics, arts and culture, a progressive government, and is one of the most forward-thinking cities in North America. The public transportation is reliable, and the streets are very bicycle friendly. I would highly encourage prospective students to visit during the summer. One day I hope to call it my home!

Did you have any international experience before coming to Canada (did you work or study abroad)?

I studied abroad in China for two years as an undergraduate. Later, I worked for a company that required a lot of traveling. Working and studying abroad gave me a broad perspective and I feel very lucky to have those experiences. But if you don't have any experience abroad, don't let that hold you back! It takes courage to travel to a new country, but despite what we sometimes hear in the media, the world is actually a very friendly place! If you choose to visit, I think you will find Canadians very welcoming.

Can you tell us about your work at MILA? What's your research about?

MILA is a research lab at UdeM, which includes researchers from McGill, Polytechnique and the greater Montreal area. I am doing research in robotics and machine learning. Although we have made recent progress in prediction and classification, machine learning is still developing the software tools and models for teaching the next generation of robotics systems. Together with colleagues from GEODES, we are trying to improve the way we design, teach and diagnose robotic systems.

Today, when we want to teach machines something new, we must write down very precise and detailed instructions. This takes a lot of effort to find equations and carefully translate them into electrical signals. In the future, we may be able to teach robots much in the same way as we teach children - by speaking instructions or demonstrating a new task in person. Getting robots that learn the same way humans do will require fundamental progress in machine learning, software and controls.

How is it to work in Yoshua Bengio's team?

The team is overflowing with good ideas! We have an open and collaborative research environment. Each week, researchers from around the world come to Montreal to give lectures on machine learning. We have weekly reading groups on deep learning, neuroscience, natural language processing, speech recognition and robotics. If you are interested in machine learning, consider submitting an application!

Dr. Bengio sets a very high standard for the lab. His commitment to supporting future generations of scholars is also very generous. The MILA lab is home to many gifted mentors and colleagues, including my advisor, Dr. Paull. We have talented researchers from around the world, including Brasil, China, India, Russia and the United States. I feel very lucky to be part of such a vibrant intellectual community.

What is the impact of having a UdeM's diploma on the market place?

A good diploma can certainly open many doors, and UdeM has a strong reputation among employers. But the people you meet and the ideas you share are often far more important. A UdeM diploma will equip you with the tools for pursuing a career in science, technology, business, or medicine. As a student, you will meet talented colleagues, have stimulating discussions, face challenging problems, discover new ideas, and emerge with a world-class education.

Based on the people I have met at UdeM, the marketplace will better off with them working in it. When we look back in several decades, I am confident we will see the campus as a kind of Menlo Park or Bell Labs of the 21st century. Students from over 120 countries come to pursue an education at UdeM. There is an electricity here, a kind of enthusiasm you would be hard pressed to find on any campus in the world. Come visit us and see it for yourself!

Studying Deep Learning at the Université de Montréal: A Key to Success

When Breandan Considine, who is from Bethlehem, New Hampshire in the United States, decided to pursue graduate studies, he knew he would apply to one of the world's most renowned labs for deep-learning research. The MILA (Montreal Institute for Learning Algorithms) was founded by Université de Montréal Professor Yoshua Bengio, one of three founders of deep learning. Breandan holds a coveted position in Yoshua's team, doing research in software engineering with the goal of teaching robots the same way as we teach children.

As an undergraduate student at the Rochester Institute of Technology in Rochester, New York, Breandan had the opportunity to study for two years in China. "Working and studying abroad gave me a wider perspective and I feel very lucky to have those experiences. It takes courage to travel to a new country, but despite what we sometimes hear in the media, the world is actually a very friendly place!" Wanting to pursue graduate studies somewhere closer to home, Breandan realized that "studying at UdeM was an easy choice because the Université de Montréal is a beacon for machine learning research." Indeed, several major AI events are organized at UdeM. Nearly every week, computer science students have the opportunity to attend lectures given by researchers from around the world. The topics are as diverse as UdeM's fields of expertise: deep learning, neuroscience, natural language processing, speech recognition, robotics, and much more.

In a world where success entails a heavy workload, we sometimes forget that it is also important to have fun. This is what makes Montreal such an interesting place to be. "Montreal is a very lively city, and offers a number of opportunities for work, study, and recreation. It boasts world-class art and culture, a progressive government, and is one of the most forward-thinking cities in North America. The public transportation is reliable and the streets are very bicycle-friendly." Furthermore, Breandan gets to practice his French, given that Montreal is officially bilingual. Even though he's not yet fluent, the computer science student enjoys the challenge of living in a bilingual environment. Both the Université de Montréal and MILA offer several French courses to newcomers and Intermediate French speakers.

However, it's not just Montreal's vibrant lifestyle and the opportunity to learn French that have brought Breandan to Canada: his eagerness to learn and to contribute to advances in science make Montreal a top destination. "Although we have seen recent progress, machine learning is relatively young and our field is still developing the tools and infrastructure for building reliable software systems. Together with colleagues from GEODES, we are trying to improve the way we design, teach, and diagnose robotic systems". The main goal is for robots to learn the same way humans do, "by speaking instructions or demonstrating a new task in person" instead of writing down very detailed instructions.

Being part of Yoshua Bengio's team is one of the most amazing experiences that Breandan has had. He feels very lucky to be part of such an intellectual community. "Dr. Bengio sets a very high standard for the lab. His commitment to supporting future generations of scholars is also very generous. The MILA lab is home to many gifted mentors and colleagues, including my advisor, Dr. Paull. We have talented colleagues from around the world, including Brazil, China, India, Russia, and the United States", he explains.

Breandan's research experience coupled with the network that he is currently building during his time at UdeM will be key for succeeding in today's competitive job market. "A UdeM diploma will equip you with the tools for pursuing a career in science, technology, business, or medicine". Even more, the UdeM student experience remains priceless: "you will meet talented colleagues, have stimulating discussions, face challenging problems, discover new ideas, and emerge with a world-class education. There is an electricity here, a kind of enthusiasm you would be hard pressed to find on any campus in the world. Come visit us and see it for yourself!".

Keep on reading:

From India to Mila: Working Under the Guidance of Yoshua Bengio

Greater Montreal: A Driving Hub of Artificial Intelligence