

# Francisco Emiliano Lopez Saavedra

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## EDUCATION & CERTIFICATIONS

### Master of Science in Computer Science (Machine Learning)

Université de Montréal/Mila

Sep. 2025 – Apr. 2027

Montréal, QC

- **Scholarship:** Bourse d'exemption pour les étudiants étrangers, the highest academic merit scholarship for international students.

### Bachelor of Science in Computer Science and Mathematics

Université de Montréal

### TRAIL AI Practitioner Certification

Mila

2025

- Designed for AI specialists, this program allowed me to acquire **practical skills in fairness, transparency, explainability, AI ethics, and responsible generative AI**, to advance responsible AI initiatives.

## EXPERIENCE

### Data Scientist I — Intact Lab

Intact Financial Corporation

Sept. 2025 – Dec. 2025

Montréal, QC

- Developing innovative solutions using **machine learning, AI, and statistical modeling** to extract insights from complex datasets.
- Gaining **hands-on experience** with diverse data sources, **geospatial, telematics, text, and image data**, to support research-driven insurance and urban resilience initiatives.

### Data Science Intern

ÉAU (Écosystèmes Alimentaires Urbains) | Supervised by Prof. Fabian Bastin, Université de Montréal

Jan. 2025 – April 2025

Montréal, QC

- **Designed and developed** a **full-stack web interface** using **React.js** and **InfluxAPI** to visualize and control the anomaly detection process, enabling selective removal of erroneous data and improving data reliability.
- **Built and deployed** an **ETL pipeline** from InfluxDB to a PostgreSQL database using Python, integrating real-time anomaly detection that **reduced** sensor data noise by over **50%**.
- **Engineered and evaluated** machine learning models for **time series forecasting**, predicting system performance using real-time environmental sensor streams.

## PROJECTS

### Montreal Robotics Summer School

Mila Quebec AI Institute | Directed by Prof. Glen Berseth

Summer 2025

Montréal, QC

- Completed a week-long intensive program on **robotics and deep reinforcement learning**, including lectures, tutorials, and labs, culminating in a final challenge to develop a **vision-based navigation controller** for a quadruped robot.
- Worked hands-on with **humanoid and quadruped robots**, applying **sim2real transfer** techniques and vision-based control strategies.

### Downscaling Climate Models

UdeM

Winter 2023

Montréal, QC

- **Enhanced** climate modeling accuracy at finer scales by integrating **high-resolution datasets** and **topological indicators** into large-scale simulations. Applied **deep learning architectures** like **ResNet** and **U-Net** to refine regional projections.
- **Built and optimized** a modular deep learning pipeline using **PyTorch** and **NumPy**, enabling efficient experimentation on large-scale geospatial data.

## SKILLS

**Languages** : Python, JavaScript, TypeScript, Java, C++, R, Matlab, SQL, HTML, CSS

**Tools/Frameworks** : GitHub, Linux, React.js, Node.js, Flask, FastAPI, TensorFlow, PyTorch, Keras, Numpy, Pandas, Scikit-learn, Unreal Engine, InfluxDB