

# Diego Gomez

**Email:** gomeznor@ualberta.ca

**Phone:** (+1) 780-695-4563

 [tarod13](#)

 [dfgomez2a](#)

**Research interests** Reinforcement learning, deep learning, representation learning, continual learning, meta-learning, multi-agent learning, causal inference

## **Publications** Peer-reviewed Articles

### **Proper Laplacian Representation Learning**

Diego Gomez, Michael Bowling, Marlos C. Machado.

*International Conference on Learning Representations, 2024.*

### **Information Optimization and Transferable State Abstractions in Deep Reinforcement Learning**

Diego Gomez, Nicanor Quijano, Luis Felipe Giraldo.

*IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022.*

## **Theses**

### **Training Adversarial Models with Evolutionary Dynamics**

*M.Sc. thesis, Universidad de Los Andes, 2022*

### **Unsupervised Learning of Lattice Models**

*B.Sc. thesis, Universidad de Los Andes, 2019.*

## **Work experience**

### **Research Assistant**

Jan 2024 – Present

*University of Alberta*

Supervisors: Marlos C. Machado

### **Graduate Research Assistant Fellow**

May 2023 – Dec 2023

*University of Alberta*

Supervisors: Marlos C. Machado and Michael Bowling

### **Machine Learning Analyst**

June 2021 – August 2022

*Mercado Libre, Applied Machine Learning*

### **Professional Researcher**

March 2021 – June 2021

*Universidad de Los Andes, Industrial Engineering Department*

Project: Development of a vision and computational learning methodology for the prediction of viability and vigor of seeds of native agricultural products.

Supervisor: Camilo Andrés Franco de los Ríos

## **Teaching experience**

### **Graduate Teaching Assistant, Comp. Science**

September 2022 – April 2023

*University of Alberta*

CMPUT 466/566: Introduction to Machine Learning (undergraduate & graduate)

CMPUT 175: Introduction to the Foundations of Computation II (undergraduate)

### **Graduate Teaching Assistant, Industrial Eng.**

August 2020 – December 2020

*Universidad de Los Andes*

MIA 4203: Advanced Models for Data Analysis 2 (graduate)

	MIA 4400: Marketing Decision Models (graduate)	
	<b>Graduate Teaching Assistant, Electrical Eng.</b> <i>Universidad de Los Andes</i>	January 2020 – June 2020
	IELE 2300: Control Systems Analysis (undergraduate)	
	<b>Instructor, Physics</b> <i>Universidad de Los Andes</i>	January 2018 – May 2018
	Clínica de Problemas (undergraduate & graduate)	
<b>Education</b>	Master of Science in Computing Science <i>University of Alberta</i> (GPA: 4.0/4.0)	2022 – present Edmonton, Canada
	Master of Science in Electronic Engineering <i>Universidad de Los Andes</i> (GPA: 5.0/5.0)	2020 – 2022 Bogotá, Colombia
	Bachelor of Science in Electronic Engineering <i>Universidad de Los Andes</i> (GPA: 4.67/5.0)	2013 – 2019 Bogotá, Colombia
	Bachelor of Science in Physics <i>Universidad de Los Andes</i> (GPA: 4.67/5.0)	2014 – 2019 Bogotá, Colombia
<b>Honors and scholarships</b>	Computing Science MSc Early Achievement Award Award based on academic and research achievements.	2024
	Graduate Students' Association Academic Travel Grant Travel grant based on academic performance.	2023
	<i>Cum Laude</i> in Electronic Engineering (graduate) Awarded to the top 3% GPAs of the Engineering Faculty in the last five years.	2022
	<i>Magna Cum Laude</i> in Electronic Engineering Awarded to the top 1% GPAs of the Engineering Faculty in the last five years.	2019
	<i>Cum Laude</i> in Physics Awarded to the top 3% GPAs of the Science Faculty in the last five years.	2019
	<i>Santiago Pardo Ramírez</i> Scholarship Full tuition scholarship (50,000 USD over 6.5 years) granted for performance in SABER national test.	2013
	EEML Best Poster Award <i>East European Machine Learning Summer School</i>	2019
<b>Service and Outreach</b>	Reviewer: Reinforcement Learning Conference	2024
	Reviewer: IEEE Transactions on Pattern Analysis and Machine Intelligence	2023
	Reviewer: IEEE 5th Colombian Conference on Automatic Control (CCAC)	2021
<b>Other academic experience</b>	<b>Data Science for All / Colombia program</b> MinTIC and Correlation One. 12 week intensive data science program.	May 2020 – August 2020 Bogotá, Colombia
	<b>Academic Exchange Program</b> The University of Melbourne. Advanced Control Systems, Robotics, Embedded System Design.	July 2016 – December 2016 Melbourne, Australia

## Skills

### **Programming**

Proficient in: Python.

Familiar with: Matlab, C, SQL, HTML, JavaScript.

### **Machine learning libraries**

JAX, PyTorch, Keras, Scikit-learn.

### **Languages**

Spanish (native), English (C1 - IELTS: 8/9) , Japanese (basic level - JLPT N5)