Diego Gomez

Email: gomeznor@ualberta.ca   tarod13
Phone: (+1) 780-695-4563   dfgomez2a
Website: https://tarod13.github.io/

Research interests	Reinforcement learning, representation learning, continual learning, meta-learning, multi-agent learning, information theory

Education		
Doctor of Philosophy in Computing Science	2025 – Present	
University of Alberta	Edmonton, Canada	
Master of Science in Computing Science	2022 – 2023	
University of Alberta (GPA: 4.0/4.0)	Edmonton, Canada	
Master of Science in Electronic Engineering	2020 – 2022	
Universidad de Los Andes (GPA: 5.0/5.0)	Bogotá, Colombia	
Bachelor of Science in Electronic Engineering	2013 – 2019	
Universidad de Los Andes (GPA: 4.67/5.0)	Bogotá, Colombia	
Bachelor of Science in Physics	2014 – 2019	
Universidad de Los Andes (GPA: 4.67/5.0)	Bogotá, Colombia	

Publications

Peer-reviewed Articles

Proper Laplacian Representation Learning
Diego Gomez, Michael Bowling, and Marlos C. Machado.
International Conference on Learning Representations (ICLR), 2024.

Information Optimization and Transferable State Abstractions in Deep Reinforcement Learning
Diego Gomez, Nicanor Quijano, and Luis Felipe Giraldo.
IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2022.

In Preparation

Asymmetric Laplacian Representations
Kaixin Wang, Diego Gomez, and Marlos C. Machado.
To be submitted to NeurIPS, 2025.

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	May 2023 – Present
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

<table>
<tr><td>Teaching experience</td><td>

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
MIIA 4203: Advanced Models for Data Analysis 2 (graduate)
MIIA 4400: Marketing Decision Models (graduate)

Graduate Teaching Assistant, Electrical Eng.   January 2020 – June 2020
Universidad de Los Andes
IELE 2300: Control Systems Analysis (undergraduate)

Instructor, Physics   January 2018 – May 2018
Universidad de Los Andes
Clínica de Problemas (undergraduate & graduate)

</td></tr>
<tr><td>Honors and scholarships</td><td>

University of Alberta Graduate Recruitment Scholarship   2025
Awarded to starting PhD students based on academic merits (5,000 CAD).

Computing Science MSc Early Achievement Award   2024
Awarded to 1 student based on academic and research achievements.

Graduate Students' Association Academic Travel Grant   2023
Travel grant based on academic performance.

Cum Laude in Electronic Engineering (graduate)   2022
Awarded to the top 3% GPAs of the Engineering Faculty in the last five years.

Magna Cum Laude in Electronic Engineering   2019
Awarded to the top 1% GPAs of the Engineering Faculty in the last five years.

Cum Laude in Physics   2019
Awarded to the top 3% GPAs of the Science Faculty in the last five years.

Santiago Pardo Ramírez Scholarship   2013
Full tuition scholarship (50,000 USD over 6.5 years) granted for performance in SABER national test.

EEML Best Poster Award   2019
East European Machine Learning Summer School

</td></tr>
<tr><td>Service and Outreach</td><td>

Reviewer: Reinforcement Learning Conference (RLC)   2025
Reviewer: International Conference on Machine Learning (ICML)   2025
Reviewer: International Conference on Learning Representations (ICLR)   2025
Reviewer: Reinforcement Learning Conference   2024
Reviewer: IEEE Transactions on Pattern Analysis and Machine Intelligence   2023

</td></tr>
</table>

Reviewer: IEEE 5th Colombian Conference on Automatic Control (CCAC)   2021

Other academic experience

Data Science for All / Colombia program   May 2020 – August 2020
MinTIC and Correlation One.   Bogotá, Colombia
12 week intensive data science program.

Academic Exchange Program   July 2016 – December 2016
The University of Melbourne.   Melbourne, Australia
Advanced Control Systems, Robotics, Embedded System Design.

Technical knowledge

Languages
Python, Matlab, C, SQL.

Machine learning libraries
JAX, PyTorch, Keras, scikit-learn.

Technologies
Git, Bash, Apptainer, LaTeX.