Diego Gomez

Research

Website: https://tarod13.github.io/

,, obotto 110po,, , tazo a 10.grafa 110,

interests multi-agent learning, information theory

Education Doctor of Philosophy in Computing Science 2025 – Present

University of Alberta Edmonton, Canada

Reinforcement learning, representation learning, continual learning, meta-learning,

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 ICML, 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 Research Assistant May 2023 - Present

experience University of Alberta

Supervisors: Marlos C. Machado and Michael Bowling

Machine Learning Analyst June 2021 – August 2022

Mercado Libre, Applied Machine Learning

Professional	Decearcher
Professional	Kesearcher

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

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)

Honors and scholarships

Computing Science MSc Early Achievement Award

2024

Awarded to 1 student based on academic and research achievements.

Graduate Students' Association Academic Travel Grant

Cum Laude in Electronic Engineering (graduate)

Travel grant based on academic performance.

2022

2023

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

2025

East European Machine Learning Summer School

Service and Outreach

Reviewer: International Conference on Learning Representations (ICLR)

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

Other academic

Data Science for All / Colombia program

May 2020 - August 2020

MinTIC and Correlation One.

Bogotá, Colombia

experience

12 week intensive data science program.

Academic Exchange Program The University of Melbourne.

July 2016 – December 2016 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.