Daniel Díaz Quílez

daniel.diaz@helsinki.fi | GitHub | LinkedIn | Personal Website | Helsinki, Finland
Languages: Spanish (native), English (fluent)

Education

MSc in Mathematics and Statistics *Sept 2024 – May 2026*
University of Helsinki, Finland

- Thesis: Simple Geometry without Coordinates (Model Theory). Advisor: Tapani Hyttinen.

BSc in Mathematics and Computer Science *Sept 2018 – June 2022*
Universidad Politécnica de Madrid, Spain

- Thesis: Projective and Plane Curves (Algebraic Geometry). Advisor: Alfonso Zamora.

BSc Exchange Year — Machine Learning, Systems, and Control *Aug 2021 – June 2022*
Lund University, Sweden

- Final project: Predicting a Subject's Card with the Muse-S headband.

Publications

- D. Díaz Quílez, T. Lehtonen. Abductive Explanations for Groups of Similar Samples. *Preprint*, 2026.
- M. Klang, D. Díaz Quílez, D. Medved, P. Nugues, J. Nilsson. Using Operative Reports to Predict Heart Transplantation Survival. *IEEE Engineering in Medicine & Biology Society (EMBC)*, 2022.

Academic Experience

Research Assistant — Logic and Machine Learning *May 2025 – Sept 2025*
Aalto University, Finland

- Researching SAT-based explanations for neural networks (preprint above). Advisor: Tuomo Lehtonen.

Teaching Assistant *Jan 2025 – May 2026*
University of Helsinki, Finland

- Basics of Mathematics in Machine Learning I.
- Basics of Mathematics in Machine Learning II (two iterations; gave two lectures).
- Computer & Internet (two iterations).

Teaching Assistant *Sept 2021 – June 2022*
Lund University, Sweden

- Computational Programming with Python (two iterations).

Professional Experience

Machine Learning Engineer *May 2025 – Aug 2025*
Trado Capital, Finland

- Led a two-person team building a Python ML pipeline (primarily gradient boosting) to identify real estate investment opportunities in Finland.

Robotics Software Engineer *Aug 2023 – Aug 2024*
eProsima, Spain

- C++ contributor to Fast-DDS, the default open-source middleware for ROS 2.