# Ana Ezquerro

# PhD Student at Graz University of Technology

■ ana.ezquerro@tugraz.at | so anaezquerro.github.io | in anaezquerro01 | 0009-0006-2347-9706 | a aVWJFm0AAAAJ

Access to the official web announcement is available via 🔗. All authored papers and theses include hyperlinks to their official publication websites.

#### EDUCATION

### Ph.D. in Efficient and Trustworthy Learning Algorithms

Graz. Austria

Graz University of Technology, Institute of Machine Learning and Neural Computation

09-2025 - Present

• Selected for a PhD position at TU Graz under the supervision of Ozan Özdenizci within the Bilateral Al project.

## M.S. in Artificial Intelligence

A Coruña, Spain

University of A Coruña, Faculty in Computer Science

09-2023 - 03-2025

• Honor distinction in the Master's Thesis: Graph Parsing as Sequence Labeling (to appear at RUC, temporally at •).

## B.S. in Data Science and Engineering

A Coruña, Spain

University of A Coruña, Faculty in Computer Science

09-2019 - 07-2023

• Best Academic Record (Top 1 out of 67).

• Honor distinction in the Bachelor's Thesis: Fully incremental parsing based on neural networks.

## **EXPERIENCE**

**Research Engineer** A Coruña, Spain

University of A Coruña, LyS Group

07/2023 - 09/2025 (full-time, on-site)

Novel algorithms for graph and tree parsing and deep learning architectures for structured NLP tasks. Enhanced multimodal alignment for multimodal systems.

# **Data Scientist (Internship)**

A Coruña, Spain

ABANCA, Venancio Salcines Foundation

02/2023 - 09/2023 (part-time, on-site)

Advanced Statistical models and ML techniques (supervised and unsupervised) to predict commercial activities in the customer intelligence area. Implementation of full data pipelines to extract and preprocess large datasets.

# ML Engineer (Internship)

A Coruña, Spain

Galician Institute in Technology

09/2022 - 10/2022 (part-time, hybrid)

Fine-tuning and evaluation of NLP and ASR models to design a mental healthcare chatbot with text and audio support.

**Research Assistant** A Coruña, Spain

University of A Coruña, Santander Bank

**𝚱** 09/2021 − 04/2022 (full-time, on-site)

Research collaboration with the MODES Group in the Department of Mathematics. Development of a new method for automatic covariates selection in dynamic regression models (ARIMAX) for time series analysis.

**Research Assistant** A Coruña, Spain

Centre for Information and Communications Technology Research (CITIC)

**𝚱** 07/2021 − 09/2021 (full-time, on-site)

Analysis and comparison of statistical models against ML techniques in COVID-19 data to predict UCI admission in patients.

#### Honors

2025 Spanish Doctoral Research Grant 🔗 Ministry of Universities, Spain 2025 Galician Doctoral Research Grant 2024 Master's Award for the Best Academic Access &

2024 Department Collaboration Scholarship 🔗

2024 Outstanding Degree Award 🔗

2024 Outstanding Degree Award 🚱

2023 Bachelor Fellowship by the University Chair "Cátedra CICAS" •

2023 Awards for Academic Excellence in Bachelor's Degrees 2021-22

2022 Awards for Academic Excellence in Bachelor's Degrees 2020-21

2022 Department Collaboration Scholarship 🔗

2019 Top Academic Records in Galicia for University Access

Galician Regional Government University of A Coruña, Santander Bank Ministry of Education of Spain Galician Regional Government University of A Coruña FUAC, Corunet by Sngular Galician Regional Government Galician Regional Government University of A Coruña, Santander Bank

Galician Regional Government

## RESEARCH

2025 Ana Ezquerro, Carlos Gómez-Rodríguez, David Vilares. Hierarchical Bracketing Encodings Work for Dependency Graphs (to appear). In the 2025 Conference on Empirical Methods in Natural Language Processing (EMNLP 2025).

- 2025 Ana Ezquerro, David Vilares, Anssi Yli-Jyrä, Carlos Gómez-Rodríguez. *Hierarchical Bracketing Encodings for Dependency Parsing as Tagging*. In the 63rd Annual Meeting of the Association for Computational Linguistics (ACL 2025).
- 2025 Adrián Gude, Roi Santos-Ríos, Francisco Prado-Valiño, Ana Ezquerro, Jesús Vilares. *LyS at SemEval 2025 Task 8: Zero-Shot Code Generation for Tabular QA.* In the 19th International Workshop on Semantic Evaluation (SemEval 2025) co-located with the 63rd Annual Meeting of the Association for Computational Linguistics (ACL 2025).
- 2025 Ana Ezquerro, David Vilares, Carlos Gómez-Rodríguez. Better Benchmarking LLMs for Zero-Shot Dependency Parsing. In the Joint 25th Nordic Conference on Computational Linguistics and 11th Baltic Conference on Human Language Technologies (NoDaLiDa/Baltic-HLT 2025).
- **2024** Ana Ezquerro, David Vilares, Carlos Gómez-Rodríguez. *Dependency Graph Parsing as Sequence Labeling*. In the 2024 Conference on Empirical Methods in Natural Language Processing (EMNLP 2024).
- 2024 Ana Ezquerro, David Vilares. *LyS at SemEval 2024 Task 3. An Early Prototype for End-to-End Multimodal Emotion Linking as Graph-Based Parsing.* In the 18th International Workshop on Semantic Evaluation co-located with the 2024 Annual Conference of the North American Chapter of the Association for Computational Linguistics (NACL 2024).
- **2024** Ana Ezquerro, Carlos Gómez-Rodríguez, David Vilares. *From Partial to Strictly Incremental Constituent Parsing*. In the 18th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2024).
- **2023** Ana Ezquerro, Carlos Gómez-Rodríguez, David Vilares. *On the Challenges of Fully Incremental Neural Dependency Parsing*. In the 13th International Joint Conference on Natural Language Processing and the 3rd Conference of the Asia-Pacific Chapter of the Association for Computational Linguistics (IJCNLP-AACL 2023).
- 2023 Ana Ezquerro, Brais Cancela, Ana López-Cheda. *On the Reliability of Machine Learning Models for Survival Analysis When Cure Is a Possibility*. In Mathematics 2023, Vol. 11, Nonparametric Statistical Methods and their Applications.
- 2022 Ana Ezquerro, Germán Aneiros, Manuel Oviedo. *New covariates selection method in dynamic regression models with a public implementation in R language*. In the IX Galician R Users Conference organized by MeLiSA and AMTEGA.
- 2022 Ana Ezquerro, Germán Aneiros, Manuel Oviedo. Automatic covariates selection in dynamic regression models with application to COVID-19 evolution. In The 5th XoveTIC Conference (XoveTIC 2022) organized by the Centre for ICT Research with the University of A Coruña.

#### SKILLS

**Programming** Python, Java, Matlab, Git, Julia, R, SQL

Software Git, Docker, PowerBI, Tableau, LaTeX
Languages Spanish (native), Galician (IV), English (C1)

### COURSES

• Lisbon Machine Learning School 2024 (LxMLS 2024).

## **VOLUNTEERING**

- Compensation Board Member at the Faculty in Computer Science (University of A Coruña) from 2020 to 2023.
- Active member at the Student Board of the Faculty in Computer Science (University of A Coruña) since 2021.
- Member at the Master in Artificial Intelligence Committee of University of A Coruña from 2023 to 2025.
- Member at the XII Evaluation Committee of UTC's Docentia Program from 2023 to 2025.