



# Abelardo Carlos Martínez Lorenzo

PhD student, 3rd year

Deep Learning & Natural Language Processing

Early Stage Researcher (ESR) under the **Marie Skłodowska-Curie grant** in the **Knowgraph** project - European Union's **Horizon 2020** research and innovation programme

Interested in **multilingual and cross-lingual semantics**, especially Semantic Parsing with auto-regressive models.

## CONTACT

✉ martinez@di.uniroma1.it

🌐 carlosml26

🐦 CarlosMalaga26

🏠 Knowgraph Project

## GRANTS

### 🏆 Marie Skłodowska Curie grant

PhD grant 2020

PhD under the Marie Skłodowska-Curie grant.

### 🏆 Erasmus Mundus Grant

MSc grant 2019

Erasmus+ grant for pursuing the Erasmus Mundus jointly Master degree

### 🏆 Erasmus+ grant

BSc grant 2018

Erasmus+ grant for the mobility at Charles University of Prague (Czech Republic).

### 🎓 Honors Student

Bachelor

Honors Student in BSc in Software Engineering.

## EXPERIENCE

### NLP Researcher

Babelscape (Italy)

2020 - ongoing

Research: **Multilingual and Cross-lingual Semantics** with a focus on

- Semantic Role Labeling
- Word Sense Disambiguation
- Semantic Parsing

## EDUCATION

### PhD - Computer Science

Sapienza University of Rome (Italy)

2020 - ongoing

Advisor: **Roberto Navigli**

Grant: **Marie Skłodowska-Curie grant**

Project: **EU-Horizon 2020 - KnowGraphs**

Area: Multilingual Semantics

### MSc - Big Data Management and Analytics (BDMA)

Erasmus Mundus Joint Master Degree Programme

2018 - 2020

Thesis: "Reasoning and Prediction in Knowledge Graphs"

- Final grade: **8 / 10**
- Grade Point Average: **8 / 10**

Technische Universität Berlin (**Tu-Berlin**):

- 2019/20 - Germany
- Main Course: Large Scale Analytics

Universitat Politècnica de Catalunya (**UPC**):

- 2019 - Spain
- Main Course: Big Data Fundamentals

Université Libre de Bruxelles (**ULB**):

- 2018 - Belgium
- Main Course: Business Intelligence Fundamentals

### BSc - Software Engineering

Universidad Málaga (Spain)

2014 - 2018

Thesis: "Real-time Communication System for Malaga's firefighters"

- Final grade: **9.0 / 10**
- Grade Point Average: **8.5 / 10**
- Erasmus: Univerzita Karlova v Praze (Czech Republic)

## SKILLS

Deep Learning 3+ yrs



NLP 2+ yrs



Cross-lingual NLP 2+ yrs



Semantics 2+ yrs



Semantic Parsing 2+ yrs



Knowledge Graphs 4+ yrs



Teaching 2+ yrs



## PUBLICATIONS

### 2022

Abelardo Carlos Martínez Lorenzo, Marcu Maru, Roberto Navigli. **Fully-Semantic Parsing and Generation: the BabelNet Meaning Representation.**

ACL 2022

Roberto Navigli, Rexhina Blloshmi, Abelardo Carlos Martínez Lorenzo. **BabelNet Meaning Representation: A Fully Semantic Formalism to Overcome Language Barriers.**

AAAI 2022

Pere-Lluís Huguet Cabot\*, Abelardo Carlos Martínez Lorenzo\*, Roberto Navigli. **AMR Alignment: Paying Attention to Cross-Attention.**

Under review

Zoi Kaoudi, Abelardo Carlos Martínez Lorenzo, Volker Markl. **Towards Loosely-Coupling Knowledge Graph Embeddings and Ontology-based Reasoning.**

arXiv

## ATTENDANCE

The 36th Conference of the Association for the Advancement of Artificial Intelligence.. **AAAI - Online (February 2022).**

Conference

The Joint Conference of the 60th Annual Meeting of the Association for Computational Linguistics. **ACL - Dublin, Ireland (May, 2022).**

Conference

The 6th International Summer school in Deep Learning. **DeepLearn - Gran Canaria, Spain (Summer 2022).**

Summer School

Knowgraphs ITN Workshop in Transversal Skills. **Vienna, Austria (April 2022).**

Workshop

Knowgraphs ITN Workshop in Transversal Skills. **Groningen, Netherlands (September 2022).**

Workshop

## OTHER

- Reviewed papers for top conferences.
- Teaching assistant for the MSc course on NLP at Sapienza University of Rome.