# **Alessandro Soccol**

# M.Sc. Student in Artificial Intelligence and Research Assistant

■ alessandrosoccol@gmail.com in Linkedin GitHub

## **Work Experience**

## University of Cagliari | Research Assistant

Cagliari, IT | August 2024 - Ongoing

- Presented a paper in the 18th ACM Conference on Recommender Systems with 1100+ participants.
- Involved in research activities and funding proposals.
- Mentored 1 B.Sc. student for his Bachelor's degree thesis.

# University of Cagliari | Research Intern

Cagliari, IT | Sept 2023 - July 2024

• Research Areas: Recommender Systems, Explainability, Natural Language Processing

## Main Author Publications

**Soccol, A**, et. al. KGGLM: A Generative Language Model for Generalizable Knowledge Graph Representation Learning in Recommendation. In Proceedings of the 18th ACM Conference on Recommender Systems (**RecSys** '24) [Paper] [GitHub]

**Soccol, A.**, et al. hopwise: A Python Library for Explainable Recommendation based on Path Reasoning over Knowledge Graphs. In proceedings of the 34th ACM Conference on Information and Knowledge Management (**CIKM** '25)[GitHub]

#### Education

# M.Sc. in Artificial Intelligence (AI) - Excellence Program

Cagliari, IT | Expected July 2026

University of Cagliari

• The Excellence Program provides funding for advanced courses and enrichment activities beyond the standard Master's curriculum.

## **B.Sc. in Computer Science**

Cagliari, IT | Sept 2021 - July 2024

University of Cagliari

- Graduated with honours.
- In the top 5% students.
- Work accepted in the 18th ACM Conference on Recommender Systems [Paper].
- First graduate of the Bachelor's degree course.

#### **B.Sc.** in Computer Engineering

Gijón, ES | Jannuary 2024 - June 2024

University of Oviedo

- Won an Erasmus+ scholarship to study for a period abroad
- Knowledge gained in Network and Systems Architecture and Security of Networks and Services.

# **Projects**

#### A comparison of oversampling techniques using GAN and CycleGAN | Python, Keras, Tensorflow

- Conducted a comparative study of GAN and CycleGAN frameworks to enhance model performance. [GitHub]
- Generated 1,500+ synthetic data samples to improve a binary classifier's accuracy using Keras and TensorFlow.

## **Spam email classification using Machine Learning** | Python, Scikit-Learn, imblearn

• Built a binary classifier to detect spam emails using advanced machine learning techniques, achieving 96% accuracy. [GitHub]

#### Skills

Languages: Python, R, SQL, LaTex

**Tools**: PyTorch, Tensorflow, Keras, Huggingface Transformers, Pandas, Polars, Git, PostgreSQL, Docker, Git, AWS, Azure **Technical Skills**: Machine Learning, Deep Learning, Graph Neural Networks, Data Mining, Statistics, Recommender Systems, Natural Language Processing, Reinforcement Learning, Graph Representation Learning, Data Structures and Algorithms, Knowledge Graphs