## Curriculum Vitae per la destinazione "ai fini della pubblicazione"

 $(+39)3291254405 \diamond lorenzoproietti16@gmail.com$ 

#### **EDUCATION**

### Sapienza University of Rome

September 2019 - January 2022

M.Sc in Engineering in Computer Science, 110/110 cum laude.

Department of Computer, Control and Management Engineering.

Average exam grade: 29.43/30.

#### Sapienza University of Rome

September 2016 - October 2019

Bachelor's degree in Computer and System Engineering, 110/110 cum laude.

Department of Computer, Control and Management Engineering.

Average exam grade: 29.41/30.

#### **PROJECTS**

# Improving Collaborative Filtering for a Recommender System Through Topics Diversification

This was a team project in which the goal was to see how a classic approach such as Collaborative Filtering for Recommender Systems can be improved by trying to diversify the products it returns based on similarity metrics. The Recommender System was implemented using the Python programming language.

#### Link Prediction in Disease Gene Association Networks

It was a team project related to the task of link prediction in disease-gene association networks. Several approaches were tested, the best of which, implemented in TensorFlow 2, made use of a Graph Convolutional Network.

Enhancing Generation Strategies in Seq2Seq Formulations for Exemplification Modeling This is my master thesis project where the goal was to improve generation strategies for Exemplification Modeling, Natural Language Processing task. In particular, the focus was on retrieval augmented approaches. For the development of the project, I used PyTorch. The project was completed under the supervision of Professor Roberto Navigli, head of the Sapienza NLP group.

#### ONGOING ACTIVITIES

At the moment I am collaborating with the Sapienza NLP Group for research activities related to the Semantic Parsing, task of the Natural Language Understanding.

#### ACADEMIC ACHIEVEMENTS

I was selected for the Honors Program of the Master of Science in Engineering in Computer Science. In this additional work, I focused on Natural Language Processing and in particular on the Exemplification Modeling task, improving the generation strategies. This work was expanded in my master thesis project. My tutor was Professor Roberto Navigli.

#### TECHNICAL SKILLS

#### **Programming**

Python  $\bullet$  Java  $\bullet$  Kotlin  $\bullet$  C  $\bullet$  Scala  $\bullet$  Ruby

#### Frameworks

Web: Ruby on Rails ● Flask

Machine Learning: PyTorch ◆ PyTorch Lightning ◆ TensorFlow ◆ Keras ◆ Scikit-learn

Python Data Science Technologies: Pandas • NumPy • PySpark

## LANGUAGES

Italian: Mother Tongue

English: Fluent