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### Personal Information

Born October 29<sup>th</sup>, 1998, Vicenza (VI), Italy  
Citizenship Italian, Australian  
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### Education and Qualifications

- 11/2022 - **PhD in Information Engineering and Computer Science**, *Fondazione Bruno Kessler*  
Ongoing (FBK) and University of Trento, Trento, Italy  
ELLIS PhD program  
**Project:** *Analysing the effect of counter-narratives on hateful conversations online*  
**Advisors:** Sara Tonelli, Bruno Lepri, Marco Guerini, Goran Glavaš
- 09/2020 - **Master's Degree in Computer Engineering-curriculum AI and Robotics**, *University of Padua, Dep. of Information Eng.*, Padua, Italy  
07/2022  
**Main Subjects:** Machine Learning, Deep Learning, Natural Language Processing, Computer Vision, Learning from Networks, Big Data Computing  
**Dissertation:** *Leveraging Recursive Neural Networks on Dependency Trees for online-toxicity detection on Twitter*  
**Evaluation:** 110/110 cum laude  
**Advisors:** Giorgio Satta, Fabio Vandin, Dirk Hovy, Federico Bianchi
- 09/2017- **Bachelor's Degree in Information Engineering**, *University of Padua, Dep. of Information*  
09/2020 *Eng.*, Padua, Italy  
**Main Subjects:** Calculus, Data and Algorithms, Signal and Data Analysis, System Modeling, Telecommunications, Electronics, General Physics  
**Dissertation:** *Efficient Algorithms for computing the effective diameter of graphs*  
**Evaluation:** 110/110 cum laude  
**Advisor:** Andrea Alberto Pietracaprina

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## Experience

- 03/23 - 09/23 **Teaching Assistant**, *University of Trento*, Department of Information Engineering and Computer Science, **Class:** Applied Natural Language Processing (prof. Jacopo Staiano)  
Involved in teaching activity, managing 10 hours of lectures over 48
- 09/22 - 10/22 **Research Intern (PhD Incoming)**, *Fondazione Bruno Kessler (FBK)*, Trento, Italy  
Research period previous to the beginning of the PhD course, working on counter-narrative strategies dealing with language and network structures (PIs Bruno Lepri, Sara Tonelli, Marco Guerini)
- 06/22 - 08/22 **Research Intern**, *Bocconi University*, Department of Computing Sciences, Milan, Italy  
Internship at MilaNLP research group (PI Dirk Hovy), working on syntax-aware and context-aware NLU models
- 09/21 - 07/22 **Teaching Assistant**, *University of Padua*, Department of Information Engineering, **Classes:** Programming Laboratory (proff. Stefano Ghidoni and Luca Tonin); Big Data Computing (proff. Andrea Alberto Pietracaprina and Francesco Silvestri); Artificial Intelligence (proff. Loris Nanni and Nicola Bellotto)  
Involved to assist students during laboratory activities

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## Languages

- Italian Native Language  
English High Level

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## IT Skills

- Programming C, C++, Java, Python, Matlab  
Libraries PyTorch, HuggingFace, OpenCV, Keras, Apache Spark  
General Latex, Visual Studio, Eclipse, Anaconda, CLion, PyCharm, IntelliJ, Google Colab, Jupyter Notebook, Github

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## Awards

**PhD Scholarship** (Fondazione Bruno Kessler and University of Trento): fixed-theme scholarship to carry out the PhD. The position is part of the FBK International PhD program, working in the Digital Humanities research group.

**ELLIS PhD Program** (ELLIS Society): admitted in the ELLIS PhD Program, with the aim of incentivizing collaborations among researchers in Europe.

**Le Mille e una Lode** (University of Padua): award given to the top 3% students of each degree course. Won for three editions (2018, 2019, 2021).

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## Miscellaneous

11/22 **Program Committee member at the Workshop on Natural Language for Artificial Intelligence (NL4AI, 6th edition)**, co-located @ AIXIA conference. November 28<sup>th</sup> - December 2<sup>nd</sup>, 2022, University of Udine, Udine, Italy

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## Research Interests

### **Natural Language Processing for Social Phenomena:**

Social Networks give us the need to address social problems, and the possibility to study multi-party and multi-turn dialogues. Tasks such as Hate Speech detection, Fake News detection, Stance detection, or Response Generation share the same social environment and may share common NLP solutions. Researching these models has several advantages, such as the ability to model such social situations and to counteract online toxicity, despite widespread diffusion.

### **Context-aware Natural Language Understanding models**

In the case of social messages, managing the social context in which they appear has been little studied in the past. A context-aware NLU model can generate a representation of the message by inferring contextual information, such as in terms of social interactions (who responded to whom), social following (who follows whom and can react), or reactions. The answer to this need can come from Network Analysis, deterministic to learning-base features extractions, but an efficient combination with NLP models is still lacking.