Pietro Lesci

pietrolesci@outlook.com

EDUCATION

PHD STUDENT @ UNIVERSITY OF CAMBRIDGE
October 2021 – present | Cambridge, UK

I am working with Prof Andreas Vlachos on compute- and data-efficient approaches for NLP. Currently focusing on active learning for large and imbalanced datasets [2]

MSC ECONOMIC AND SOCIAL SCIENCES @ BOCCONI UNIVERSITY
Sept 2016 - Mar 2019 | Milan, IT

I specialised in Bayesian Statistics, Econometrics, and Causality. Dissertation: *"Deep Learning: A Statistical Perspective"*. Grade: 104/110

BSC ECONOMICS AND MANAGEMENT @ UNIVERSITA' CATTOLICA DEL SACRO CUORE
Sept 2013 - Sept 2016 | Milan, IT

I specialised in Macroeconomics and Agent-Based Modelling. Dissertation: *"Market Sentiment and Monetary Policy"*. Grade: 110/110 summa cum laude

SCIENTIFIC HIGH SCHOOL DIPLOMA @ LICEO SCIENTIFICO
Sept 2008 - July 2013 | Castrovillari, IT

The curriculum emphasised the link between the humanistic tradition and scientific culture. Grade: 95/100

PROFESSIONAL EXPERIENCE

APPLIED SCIENTIST INTERN @ AMAZON AWS AI LABS
September 2022 – January 2023 | Barcelona, ES

I worked with Lluis Marquez on efficient dialogue state tracking with large language models. Our work was published at the ACL 2023 conference [1]

SENIOR ASSOCIATE, DATA SCIENCE @ BAIN & COMPANY
March 2020 – October 2021 | Milan, IT

- Data-driven quality assurance (industry: mining)
- Pricing optimization (industry: packaging machines)
- Predictive maintenance in hydropower plants (industry: energy)
- Client segmentation (industry: road tolls and telco)
- Brand penetration maps (industry: food & beverages)
- Development of an internal Python library for NLP

RESEARCH ASSISTANT @ BOCCONI UNIVERSITY BIDSA CENTER
August 2019 – March 2020 | Milan, IT

I specialised in NLP working with Prof Dirk Hovy on the identification of online abuse on Twitter and developed the *Wordify* and *MACE* web-apps

DATA SCIENCE TRAINEE @ EUROPEAN CENTRAL BANK
February 2018 – November 2018 | Frankfurt am Main, DE

- Data quality management of granular master data
- Database reconciliation: lead of the RIAD–GLEIF reconciliation project
- Automation of a data ingestion and de-duplication procedure (80% efficiency gain) used in the computation of the Euro Short-Term rate
- Production of official statistical reports published on the ECB website

ACADEMIC ROLES

CONFERENCE REVIEWER
Reviewed for top-ranked international conferences (ACL, EACL, and EMNLP)

HEAD DEMONSTRATOR
Machine Learning and Real-world Data, University of Cambridge, 2022 and 2023

SUPERVISOR
Machine Learning and Real-world Data, University of Cambridge, 2022

PUBLICATIONS

[1] P. Lesci, Y. Fujinuma, M. Hardalov, C. Shang, Y. Benajiba, and L. Marquez. Diable: Efficient dialogue state tracking as operations on tables. In *Findings of the Association for Computational Linguistics: ACL 2023*, pages 9697–9719, Toronto, Canada, July 2023. Association for Computational Linguistics.

[2] P. Lesci and A. Vlachos. Computationally efficient active learning for large imbalanced datasets. Under Review.

TALKS

"Transformer Models in NLP, Theory and Applications" @ Ammagamma, 2022

SKILLS

Italian (native), English (fluent), and French (basic). Python, R, Stata, SQL, LaTeX, Julia, MATLAB, and Rust

EXTRACURRICULAR

MUSIC EDUCATION & PRACTICE
Enrolled in the BSc in Jazz, GPA 29.7/30. Classical Piano (12 years) and Bass Guitar (10 years) studies obtaining Sol-Fa degree and Piano 5th year diploma. Organist and Choir Director. Singer, bassist, and arranger in jazz ensembles and a rock trio

LINKS

Github: github.com/pietrolesci
Twitter-X: @pietro_lesci
LinkedIn: linkedin.com/pietrolesci
Personal Page: pietrolesci.github.io