

Emanuele La Malfa

cs.ox.ac.uk/people/emanuele.lamalfa/

Education

University of Oxford <i>PhD/DPhil Student in Computer Science, advised by prof. Marta Z. Kwiatkowska</i>	Oct. 2019 – Present Oxford, UK
Polytechnic University of Milan <i>Master's Degree in Computer Science and Engineering</i>	Feb. 2015 – Sept. 2017 Milan, Italy
Polytechnic University of Milan <i>Bachelor's Degree in Computer Engineering</i>	Sept. 2011 – Sept. 2014 Milan, Italy

Work Experience

Research Assistant <i>Enabling rapid adoption of artificial intelligence through an anonymized data protocol and explainable models.</i> <ul style="list-style-type: none">• Collaboration with GenieAI.• Funded through the InnovateUK scheme.• The collaboration led to a paper published at EMNLP'20.	Oct. 2019 – Mar. 2021 University of Oxford, UK
Consultant <i>Consultant – IBM architect path –</i> <ul style="list-style-type: none">• Design, development and deploy of a search engine for a public financial institution.• Design, development and deploy of a cloud document management system for a public financial institution.	Mar. 2018 – Aug. 2019 IBM, Milan, Italy

Publications

Emergent Linguistic Structures in Neural Networks are Fragile Under submission (long paper) Emanuele La Malfa*, Matthew Wicker, Marta Kwiatkowska
Deep Neural Networks as Complex Networks Under review (long paper) Emanuele La Malfa*, Gabriele La Malfa*, Claudio Caprioli, Giuseppe Nicosia, Vito Latora
The King is Naked: on the Notion of Robustness for Natural Language Processing AAAI'22 (long paper, main track) (oral presentation) Emanuele La Malfa*, Marta Kwiatkowska
Characterizing Learning Dynamics of Deep Neural Networks via Complex Networks IEEE-ICTAI'21 (long paper, main track) Emanuele La Malfa*, Gabriele La Malfa*, Giuseppe Nicosia, Vito Latora
On Guaranteed Optimal Robust Explanations for NLP Models IJCAI'21 (long paper, main track) Emanuele La Malfa*, Rhiannon Michelmore, Agnieszka Zbrzeny, Nicola Paoletti, Marta Kwiatkowska
Assessing Robustness of Text Classification through Maximal Safe Radius Computation EMNLP'20 (long paper) Emanuele La Malfa*, Min Wu, Luca Laurenti, Benjie Wang, Anthony Hartshorn, Marta Kwiatkowska

Teaching Experience

Probabilistic Model Checking <i>Practicals</i>	2022 (MT) University of Oxford, UK
Machine Learning <i>Classes</i>	2021 (MT) University of Oxford, UK
Probabilistic Model Checking <i>Practicals</i>	2021 (MT) University of Oxford, UK
Fundamentals of Computer Science <i>Practicals</i>	2016 (Oct.-Dec.) Polytechnic University of Milan, Italy

Invited Lectures, Talks and Presentations

On the Notion of Robustness for Natural Language Processing <i>Talk – Department of Informatics</i>	17/01/2023 King's College University of London, UK
Robustness for Natural Language Processing <i>Lecture – Deep Fridays</i>	22/04/2022 University of Bologna, Italy
Explainable AI <i>Lecture – Advanced Artificial Intelligence Course</i>	04/03/2022 Royal Holloway University of London, UK

Tutoring and Mentoring

University of Oxford <i>Tutoring of a student who I followed with his master's thesis.</i>	2022
Lead the Future - Mentor <i>Lead the Future is a no-profit organization that helps Italian talents in STEM disciplines to find their path to brilliant careers.</i>	2022

Miscellaneous

Programming Languages: Python (fluent), worked with many languages/tools as part of my profession (C, js, ...)
Languages: Italian (native), English (fluent), Spanish (intermediate)
Conference Chair: LOD2020, LOD2021, LOD2022
Interests: Books (any kind, any topic)

Volunteering

The Kharkiv and Przemyśl Project <i>I spent a week in Przemyśl (Poland) as a volunteer to help refugees who arrived (returned) from (to) Ukraine.</i>	August 2022
Ukrainian Global University - Interviewer <i>I interviewed a dozen of perspective undergraduate Ukrainian students who want to study in a partner university abroad.</i>	June-May 2022
Eutanasia Legale - Volunteer <i>I have collected signatures for a referendum to decriminalize euthanasia. The overall campaign gathered 1.2 million valid signatures.</i>	July 2021

Awards and Scholarships

Trinity College Graduate Scholarship	2020-21, 2021-2022 <i>Trinity College, University of Oxford, UK</i>
---	--