Emanuele Rossi

EDUCATION

University of Cambridge, Cambridge — *Master in Advanced Computer Science*

OCTOBER 2018 - JUNE 2019

Graduated with **Distinction** (equivalent of **4.0 GPA**) Thesis: "**Graph Deep Learning for ncRNA data**" (<u>published</u> at KDD 2019 workshop on Graph Deep Learning). Modules:

- L90: Overview of Natural Language Processing
- L101: Machine Learning for Language Processing
- LE49: Probabilistic Machine Learning
- R250: Advanced Topics in Machine Learning
- R252: Machine learning for programming

Imperial College London, London — *Bachelor in Computer Science*

OCTOBER 2015 - JUNE 2018

Graduated with First Class Honours (equivalent of 4.0 GPA)

Worked for two terms as an **Undergraduate Maths Teaching Assistant**, running weekly tutorials with first-year Computer Science students. Awards:

- Engineering Dean's List in both first and second year.
- Gloucester Research and Olav Beckmann prizes, both for academic excellence.
- President Undergraduate Scholarship, a scholarship based on merit and awarded to only 112 people out of ~2600 first year Imperial students.

PERSONAL PROJECTS

Uncertainty Estimation in CNNs — 2019

Standard neural networks lack a principled way to measure the uncertainty in their predictions. We propose a model for image classification which combines convolutional neural networks and gaussian processes to achieve high accuracy and scalability, while also precisely estimating the uncertainty in its predictions. *Pytorch*

Adversarial Attacks on Natural Language —

2018

Developed **novel white-box** and **black-box adversarial attacks** targeting machine learning models for **natural language**. *Python*, *Keras*

LeadTheFuture — 2017–present

Co-Founder of LeadTheFuture, a non-profit organization which provides free mentorship to over 100 Italian students in STEM both from high-school and from university.

London

+44 7843826957

emanuele.rossi1909@gmail.com

Github: https://github.com/emalgorithm

Linkedin: https://www.linkedin.com/in/emanuele-rossi/

Website: https://www.emanuelerossi.co.uk/

WORK EXPERIENCE

Twitter, London — *Machine Learning Researcher*

MARCH 2019 - JUNE 2019

Working on applied and fundamental research around graph neural networks. Scaling these technologies to graphs with millions of nodes and trillions of edges. Python, TensorFlow, Pytorch

UCLA, Los Angeles — Visiting Researcher

MAY 2019 - JUNE 2019

Visiting researcher as part of <u>IPAM long program on learning</u> <u>from geometric data</u>. Worked on graph neural networks. *Python*, *Pytorch*

Fabula AI, London — Data Scientist

MARCH 2019 - JUNE 2019

Researched and developed **novel geometric deep learning models** for **fake news classification**. Fabula AI has been acquired by Twitter in June 2019. *Python, TensorFlow*

Imperial College London, London — Research Intern

APRIL - SEPTEMBER 2018

Worked under the supervision of **Prof. Michael Bronstein** on **Graph Convolutional Networks**, focusing on the task of predicting tweets virality. *Python*, *TensorFlow*

Google, Mountain View — Software Engineering Intern

JULY - OCTOBER 2017

Worked in the **Google Play Store** infrastructure team. *Java*, *ProtoBuf*, *BiqQuery*

AWARDS AND ACHIEVEMENTS

Bronze medal at Informatics Olympiads

SEPTEMBER 2014

Won a bronze medal (ranked 19th overall) at the **Italian Olympiad in Informatics** (OII), a programming competition with a high focus on algorithms where each year approximately 13,000 students compete against each other.

Member of the winning team of the Italian Olympiads in Informatics for teams

APRIL 2014

Captain of the 5 membered team which ranked $\mathbf{1}^{st}$ among all participating high schools in the country.