

# Emanuele Rossi

Castle Park, Castle Street, Cambridge CB3 0SZ  
+44 7843826957  
[emanuele.rossi1909@gmail.com](mailto:emanuele.rossi1909@gmail.com)  
Github: <https://github.com/emalgorithm>  
Linkedin: <https://www.linkedin.com/in/emanuele-rossi/>

## EDUCATION

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

OCTOBER 2018 - JUNE 2019

Expected grade: **Distinction** (equivalent of 4.0 GPA)  
Thesis: “**Graph Deep Generative Models for RNA generation**”.

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.

## WORK EXPERIENCE

### Fabula AI, London — *Data Scientist*

MARCH 2019 - PRESENT

Researching and developing **novel geometric deep learning models** for **fake news classification**. *Python, TensorFlow, GPU*

### 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.

We devised **new models** which are able to learn from graph-structured data and outperform current methods for tweet virality prediction. *Python, TensorFlow, GPU*

### Google, Mountain View — *Software Engineering Intern*

JULY - OCTOBER 2017

Developed and deployed a full-stack system to automate the process of retrieving and displaying the most important test quality metrics of the **Google Play Store** infrastructure. The system is now used internally by several teams at Google. *Java, ProtoBuf, BigQuery*

### G-Research, London — *Software Engineering Intern*

JULY - OCTOBER 2016

Developed a full-stack **monitoring service** for a distributed system based on a **microservices architecture** that makes use of messaging service *Apache Kafka*. *C#, .Net, Kafka, ProtoBuf*

## 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 **1<sup>st</sup>** among all participating high schools in the country.