

# Giuseppe Galilei

✉ giu.galilei@gmail.com

🔄 giuseppegalilei

🌐 giuseppe-galilei

📺 giuseppegalilei.com

Innovation driven and curiosity fueled, **Data Science MSc student**. Developed **AI** related products for companies, student competitions and personal projects. Worked in **international** and **multi-disciplinary** teams, with a sense of **ownership** and often covering **leadership** positions. I always keep an eye on the **end-user experience** and enjoy **experimenting** outside my main field of expertise, recently built a personal **website** and contributed to **open-source** projects related to maps and computer networks. In my free time, you can find me **mountain biking** while listening to podcasts.

## WORK EXPERIENCE

### Machine Learning Operations MLOps Engineer - internship

Blue Reply, Turin

📁 MLFlow Python Kubernetes

📅 March 2020 - May 2020

- Designed and prototyped a **production ready MLOps system** that could be put into action without disrupting the existing workflow. Tested several tools for code/data/model versioning and discussed best practices and feasibility with **Data Scientists** and **DevOps** engineers.

## EDUCATION

### Master's degree in Data Science and Engineering

Politecnico di Torino

📊 28.4/30 average grade

📅 October 2021-current

### Bachelor's degree in Computer Engineering

Politecnico di Torino

📊 104/110

📅 July 2021

## PROJECTS

### Folium [link], CasaOS-AppStore [link]

Open Source contributions

### Addressing the Challenges of Federated Learning

Research and Paper writing

📁 PyTorch Python

🔄 Code 📄 Report

- Worked in a team that identified and documented key challenges and potential solutions in Federated Learning.
- Tested FedAVG, FedGKT, and FedDyn in the case of i.i.d. balanced, non i.i.d. balanced, and non-i.i.d. unbalanced data distribution.
- Reproduced the gradient attack to address potential privacy issues.

### WAP - With A Purpose (for European Innovation Academy 2019)

Startup Concept and Digital Prototype

📁 Flask Word2Vec Natural Language Processing and Understanding JavaScript Cloud Computing

📄 Report

- Developed and executed a **whole startup idea**, from ground technology to marketing and IP protection efforts, in a multicultural and multidisciplinary team of five.
- Developed an **AI powered process** allowing users to jump, with a single click, from reading a news article about an issue to donating to NGOs working on it. The system was based on a **browser extension**, a **private cloud server**, **NLP libraries** and **third party APIs**.

### Pyna - The mood reader (showcased at Maker Faire Rome 2018)

Prototype Development and Showcase

📁 Rapid Prototyping Python OpenCV Cloud Computing

📄 Report

- Developed a device that can autonomously track the user's mood and accordingly **adapt the environment**, using light and music, to improve it.
- The computing is split between a **local device**, which has a raspberry Pi inside a custom 3d printed enclosure, and a **private cloud server**.

## HONORS AND AWARDS

### Scholarship to attend the European Innovation Academy 2019

Selected to attend a three weeks international summer school on **startup's** development, mentored by experts from renowned companies and universities. There, the prototype I developed was awarded one of the **best 10 among the 50** in competition

### Project Showcase and Press Interview at Maker Faire Rome 2018

**Hackathon** winners awarded to attend the 3-day Faire to showcase the **Pyna** project to more than **100k visitors**. Selected by "Il Messaggero", a nationally renowned italian newspaper, to conduct a **video interview** [link]

### Young Talents Program

During the bachelor degree, selected for a program reserved to **top 4%** students from all faculties to attend extra courses.

### Merit selected guest of Collegio Einaudi and scholarship winner

Each year, students living in my university residence are required to meet a **merit criteria** and follow **extra courses**.

In 2023 I also received an extra 1000 euros **scholarship** for my **academic results**, selected among the best students living in my residence in the academic year 2021/22.