

# Giuseppe Galilei

 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], Unifi Network Application [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.