

LUIGI PODDA

I am a recent graduated AI engineer with a computer science background and a strong interest in software development.

EDUCATION

- **Alma Mater Studiorum, University of Bologna, Italy**
Master's in Artificial Intelligence (2021- 2023)
110/110 with honors
- **University of Cagliari, Italy**
Bachelor's in Computer Science (2018 - 2021)
110/110 with honors

WORK EXPERIENCE

Machine Learning Intern - Thesis, Airbus Defence & Space Germany - Manching, March 2023 - August 2023

- Responsible for data generation and analysis for avionics systems to optimize mathematical models using Machine Learning algorithms (**reduced execution time by 30%**).
- Parallel computation on multicore CPU and GPU programming with CUDA architectures.
- Delivered **technical presentations** and reports to **more than 60 managers and product owners** at the mid-year review.

Computer Vision Intern, University of Cagliari July 2020 - September 2020

- Development of computer vision pipeline to detect vehicle speed from video sequences, specifically in the context of smart cities (**average relative error around 3%**).
- Subtasks: application design, dataset creation, object detection, vehicle tracking and speed measurement, test and validation.
- Relevant experience with COCO, OpenCV, Yolo and CUDA.

RELEVANT STUDENT PROJECTS

- Developed an AI application for predictive maintenance and anomaly detection for industrial machines based on sensor data (**saved up to 18% of maintenance costs**).
- **Docker** setup to run **Spark ML** applications on **Hadoop** file system and **Yarn** resource manager in cluster mode.
- **Generative Question Answering** on the CoQA dataset using distilled GPTs.
- **Part-of-Speech (POS) tagging** using Recurrent Neural Architectures to address an **automated labeling problem**.
- Italian hate speech detection EVALITA 2020.

SPORT

Field Hockey

- Field hockey player for S.G. Amsicora Cagliari. In the last fifteen years I played in Italian and European competitions.
- The most valuable lessons I have learned are: **never give up**, the importance of **perseverance**, the value of **supporting each other** and the ability to **perform under pressure**.

I authorize the use of the personal data contained in my resume in accordance with Legislative Decree 196/2003 and EU Regulation 2016/679.

LANGUAGES

- Italian - Native
- English - Advanced
- German - Beginner

SKILLS

- Machine Learning
- Deep Learning
- Anomaly Detection
- Predictive Maintenance
- Computer Vision
- GPU programming
- Parallel programming
- Computer Science
- Communication
- Problem Solving
- Agile and Scrum
- Cooperation
- Principal Thinking

PROGRAMMING LANGUAGES

Python, C, C++, Java, C#, Bash, SQL

LIBRARIES AND FRAMEWORKS

- Keras
- Tensorflow
- PyTorch
- OpenCV
- Numpy
- Pandas
- Scikit-learn
- CUDA
- Git
- Docker
- PySpark
- Jira