CV - MARCO MARIANO DE CARLO
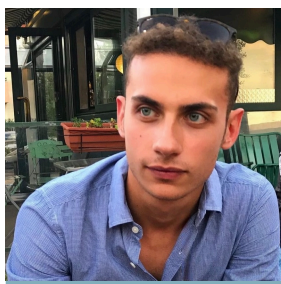

LinkedIn: https://www.linkedin.com/in/marco-de-carlo-7a1544175/

LANGUAGE SKILLS
- Mother tongue: Italian
- Other language: English

MAIN PROGRAMMING LANGUAGES
- Python
- Java
- SQL
- Javascript
- Typescript
- HTML
- CSS
- C
- Bash

MAIN LIBRARIES, TOOLS AND DATA FORMAT
- Python: Pandas, Numpy, Scikit-Learn, Scipy, Matplotlib, Seaborn, Xarray, Keras, Tensorflow, OpenCV, GeoPandas, Cartopy, Basemap, Anaconda
- C: MPI; OpenMP
- Git, Docker
- CSV, JSON, XML

Post Degree Researcher at Euro-Mediterranean Center on Climate Change (CMCC) in the field of Data Science for Climate Change with a strong inclination towards Machine Learning and autonomous learning techniques.

PROFESSIONAL EXPERIENCE
- Research Intern, CMCC Foundation (Euro-Mediterranean Center on Climate Change) - Advanced Scientific Computing (ASC) Division,   March 2023 - May 2023
- Post Degree Researcher, CMCC Foundation (Euro-Mediterranean Center on Climate Change) - Advanced Scientific Computing (ASC) Division,   November 2023 - Actually

INSTRUCTION
- M.Sc. in Computer Engineering - Università del Salento, Lecce 2020 - 2023
- B.Sc. in Ingegneria dell'Informazione - Università del Salento, Lecce 2015 - 2019
- Diploma scientifico - Liceo Scientifico Giulietta Banzi Bazoli, Lecce 2010 - 2015

BACHELOR'S THESIS
Prototype of a database feeding software to support machine learning for predictive maintenance in aeronautics

MASTER'S THESIS
Bayesian Optimization approach to improve surface oil spill simulations of MEDSLIK-II model

SKILLS
- Machine Learning and Artificial Intelligence theory and practice
- Computer Vision for image formation, reconstruction and inference of movement models also through machine learning and deep learning techniques
- Database theories, techniques and tools to design / implement databases and database applications
- Knowledge of IoT theory and practice for the main technologies used for the development of the main use cases concerning the field
- Software Engineering and full stack development
- Estimation theory and data analysis with application
- System application programming on a UNIX system
- Design, analysis and implementation of sequential and parallel algorithms
- Principles of operation of a modern computer network and how they could be addressed in order to ensure appropriate delivery of the application services

PROJECTS
- EGI iMagine, the project provides a portfolio of image datasets, high performance image analysis tools empowered with Artificial Intelligence (AI), and Best Practice documents for scientific image analysis. Specifically, my research in this project focuses on oil spill event detection through Machine Learning (ML) tools
- Simple application of Computer Vision for Armocromia techniques with the help of openCV and Convolutional Neural Network
- Traceability of products and their status through IoT devices in a cloud environment (Oracle Cloud, AWS, Microsoft Azure and ThingsBoard)
- MyLinkedIn: LinkedIn simulator (Web app and Mobile app)

- Karate athlete with CUS Lecce

- Karate agonist athlete with Athlon Lecce

- Technical karate teacher/ Aspiring karate coach

- Estimation of the relative position of a group of mobile robots based on relative distance information in 3D 'marine' environment

- Parallel algorithm for determining the connected components of an undirected graph in C and MPI

RECENT AWARDS
- 1st place in UniSalento Data Hackaton 2021/2022 with my Team

SOFT SKILLS
- Excellent listening skills towards colleagues and people with whom you interact, taking into account ideas and opinions of the team and reliability in working relationships

- Excellent Team Working skills and emotional intelligence, enhancing collaboration and respect for all team members with particular attention to stressful situations learned in the university and sports fields

- Excellent organization skills in the autonomous management of activities but also during collaboration with the team, in particular good management of activities with respect to deadlines and achievement of set objectives

- Ability to work and perform under pressure and in times of high stress, enhanced by the experiences received during university but also in a sports environment during martial arts lessons and competitions