

MATTEO BASTICO

PhD fellow of the Horizon 2020-Marie Skłodowska-Curie Actions-COFUND European program "AI4TheSciences".

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94230, France

SKILLS

Python (PyTorch, CUDA)

Computer Vision

Deep Learning / Machine Learining

Image Segmentation

Medical Imaging

Point Clouds

Git and GitHub

Communication and Teamwork

LANGUAGES

Italian (First language)

English (C1)

Spanish (C1)

French (B1-B2)

Driving license and car owner.

PROFILE

PhD fellow of the Horizon 2020-Marie Skłodowska-Curie Actions-COFUND European program Al4TheSciences at Mines Paris – PSL University (Paris, France). My current focus is the application of Deep Learning and Computer Vision techniques to medical images for the developing of computer-aided surgery planning based on State-of-The-Art technologies, such as Vision Transformers, Segment Anything Model, Convolution Neural Networks. While pursuing my master's degree, I was awarded a scholarship for a Double Master's Degree program between Italy and Spain, conducting a thesis on DL and CV applied to autonomous driving (3D depth completion and object detection).

EXPERIENCE

Al Research Scientist | UPM, Madrid, Spain 2021 - 2022

- Involved in international European Union's Horizon 2020 Projects, such as GenoMed4All and PROCare4Life.
- Developed AI model in Python, using PyTorch framework, with medical applications (DNA Analysis, Patient Identification).
- Proactively participated in team works, meetings, business trips, article publications and conferences.

ICT Help Desk Agent | IL GAZZETTINO, Venice, Italy 2018 - 2019

- Troubleshot and resolved a vast range of hardware, software, and network connectivity problems both remotely and in-place.
- Answered calls, responded to emails, and spoke with clients face-to-face.

Front-End Programmer | Valore4IT, Venice, Italy 2014 - 2015

EDUCATION

PhD in AI and Computer Vision Methods for Medical Imaging and Knee Mechanical Modelling | Mines Paris - PSL University, Paris, France 2012 - 2025 (Expected)

MSc ICT for Internet and Multimedia cum Laude | University of Padua, Padua, Italy

2018 - 2021 | Final grade: 110/110 cum Laude

MSc Telecommunication Engineering | UPM, Madrid, Spain 2019 - 2021 | Final grade (MSc Thesis): 10/10

BSc Information Engineering | University of Padua, Padua, Italy 2015 - 2018 | Final grade: 105/110

TEACHING

Image Segmentation: From MLP to ViT PSL week Machine Learning for Science and Engineering, 2024

Master's Students Internship Supervision
Mines Paris - PSL University & UPM (collaboration), 2024

PUBLICATIONS & WORKS

Most recent publications are listed below, for my complete bibliography please refer to my Google Scholar or my website.

- M. Bastico et al., 'Coupled Laplacian Eigenmaps for Locally-Aware 3D Rigid Point Cloud Matching', CVPR 2024.
- M. Bastico et al., 'A Simple and Robust Framework for Cross-Modality Medical Image Segmentation applied to Vision Transformers', ICCVW 2023