MIGUEL CAMACHO

MACHINE LEARNING & RESEARCH ENGINEER

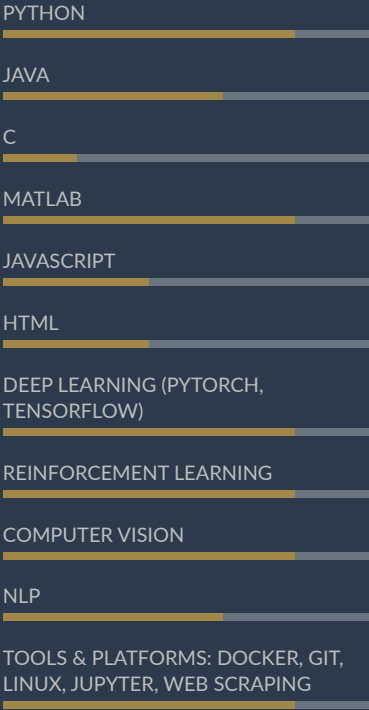Spain

micasan4@teleco.upv.es

ABOUT ME

I am a **machine learning researcher** with a strong interest in applying AI to scientific and engineering challenges.

At the CVBLab at **Universitat Politècnica de València**, I work on both academic and industry-oriented research, contributing to European projects. My experience covers areas like Deep Learning, reinforcement learning, computer vision and physics-informed models. I also develop practical tools and open-source projects, from **medical image segmentation** to **control models**.

Having built a solid research background, I am now eager to **apply** these skills to real-world problems and innovative applications.

Core technical expertise: **Python, Deep Learning, Reinforcement Learning** and **Computer Vision**

SKILLS

PYTHON

JAVA

C

MATLAB

JAVASCRIPT

HTML

DEEP LEARNING (PYTORCH, TENSORFLOW)

REINFORCEMENT LEARNING

COMPUTER VISION

NLP

TOOLS & PLATFORMS: DOCKER, GIT, LINUX, JUPYTER, WEB SCRAPING

LINKS

GitHub:
github.com/MigCaSan

LinkedIn:
https://www.linkedin.com/in/miguel-camacho-s%C3%A1nchez-37...

LANGUAGES

ENGLISH

SPANISH

COURSES

**MACHINE LEARNING
STANFORD ONLINE (COURSERA)**
DEC 2022

**DEEP LEARNING APPLIED TO SIGNAL AND IMAGE ANALYSIS
UNIVERSITAT POLITÈCNICA DE VALÈNCIA**
JUL 2021

WORK EXPERIENCE

CVBLAB - UNIVERSITAT POLITÈCNICA DE VALÈNCIA
València
Sep 2023 - Present

AI Researcher

- Technical management of EU-funded projects **METAMORPHA** and **TURBO**, coordinating with research teams and industry partners.
- Applied **reinforcement learning** and **computer vision** in multidisciplinary contexts.
- Development of AI solutions in **real-world** international frameworks.

CVBLAB - UNIVERSITAT POLITÈCNICA DE VALÈNCIA
València
Feb 2022 - Jul 2023

Research Intern

- Conducted research in **Quantum Machine Learning** with PennyLane. - Developed **reinforcement learning** models applied to complex problem-solving. - Designed and implemented **deep learning** models for signal and image analysis. - Gained experience in Python, MATLAB, TensorFlow, and PyTorch.

EDUCATION

UNIVERSITAT POLITÈCNICA DE VALÈNCIA
València
2024

MSc in Telecommunication Engineering

- Specialised in advanced communications, signal processing, and AI applications.

UNIVERSITAT POLITÈCNICA DE VALÈNCIA
València
2022

BSc in Telecommunication Technologies and Services Engineering

- Solid foundation in telecommunications, programming and applied engineering.

STANFORD ONLINE (COURSERA)
2022

Machine Learning

- Completed the foundational Stanford ML course by Andrew Ng.

UNIVERSITAT POLITÈCNICA DE VALÈNCIA
València
2021

Deep Learning Applied to Signal and Image Analysis

- Intensive course on deep learning methods applied to real datasets.

PUBLICATIONS

45TH RISØ INTERNATIONAL SYMPOSIUM ON MATERIALS SCIENCE
Sep 2025

Reinforcement learning for synchronised flow control in a dual-gate resin infusion system

IDEAL
Nov 2024

Towards Sustainable Precision: Machine Learning for Laser Micromachining Optimization