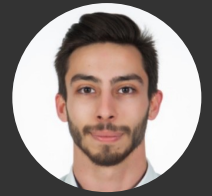


MARCOS RODRIGO TALAVERA



Ph.D. Telecommunication Engineer and AI Researcher specializing in deep learning for computer vision, with expertise in face recognition, video understanding, and vision-language models. Full profile, projects and publications at marcosrodrigo.github.io

CONTACT

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📧 @MarcosRodrigoT
🌐 Marcos Rodrigo Talavera

SKILLS

AI & Deep Learning

PyTorch ●●●●●●
TensorFlow ●●●●●●
HuggingFace ●●●●●●
OpenCV ●●●●●●
LangChain ●●●●●●
Ollama ●●●●●●

ML & Data Science

Scikit-learn ●●●●●●
NumPy / Pandas ●●●●●●
Weights & Biases ●●●●●●

Programming

Python ●●●●●●
C / C++ ●●●●●●
Bash ●●●●●●
SQL ●●●●●●
HTML / CSS / JS ●●●●●●
LaTeX ●●●●●●

Infrastructure & Tools

Linux ●●●●●●
Docker ●●●●●●
Kubernetes ●●●●●●
AWS ●●●●●●
Git ●●●●●●

Languages

Spanish (Native) ●●●●●●
English (C1 Certified) ●●●●●●
French (Basic) ●●●●●●

SUPPLEMENTARY EDUCATION

- How Diffusion Models Work (2025), DeepLearning.AI
- Generative AI with LLMs (2024), DeepLearning.AI, Coursera, AWS
- Deep Learning Specialization (2023), DeepLearning.AI, Coursera
- English as a Second Language (2015-16), UCLA
- Campus Party Tech. Event (2013), UAH
- Cognitive Development (2010-12), SAPIENTEC
- Mathematical Thinking (2006-09), Esc. Miguel de Guzmán

EDUCATION

- 📅 2020 - 2025
📍 Universidad Politécnica de Madrid, UPM **Ph.D. in Communication Technologies**
Thesis: *Automatic Sports Video Summarization with Identity-Aware Highlight Selection.*
- 📅 2018 - 2020
📍 Universidad Politécnica de Madrid, UPM **M.Sc. in Telecom. Engineering**
Thesis: *Automatic Highlight Detection in Martial Arts Tricking Videos.* Grade: 10/10.
- 📅 2013 - 2018
📍 Universidad de Alcalá de Henares, UAH **B.Sc. in Telecom. Systems Eng.**
Thesis: *Acoustic Bird Classification Using MFCC Feature Extraction.* Grade: 9/10.

PROFESSIONAL EXPERIENCE

- 📅 2020 - present
📍 E.T.S.I. Telecomunicación, UPM **Post-graduate Researcher**
Designed deep-learning pipelines for face recognition (CNNs, ViTs), video highlight detection (2D/3D CNNs, RNNs, Transformers) and multimodal video summarization (CLIP). Led R&D with Nokia and Airbus. Taught across three degree programmes, supervised two Master's theses and built a 17-node Kubernetes GPU cluster.
- 📅 2018
📍 Urban Planet **Sports Instructor**
Led group classes, ensured safety protocols and provided customer service in English.
- 📅 2017 - 2018
📍 Indra Sistemas S.A. **Junior Programmer**
Developed VoIP scripts for air-traffic management. Automated tasks and configured network equipment under Scrum.
- 📅 2016 - 2017
📍 DEYDE Calidad de Datos S.L. **Data Coder & Trainee Programmer**
Built expert systems for postal-address coding and maintained master databases.
- 📅 2013 - 2018
📍 Self-employed **Private Tutor**
Taught Maths, Physics, Chemistry and English to students preparing for university entrance.

PUBLICATIONS

- M. Rodrigo**, E. Zhong, C. R. del-Blanco, C. Cuevas, F. Jaureguizar, N. García. "ViMoCLIP: Augmenting static CLIP representations with video-motion cues for animal-action recognition." *IEEE/CVF CVPR Workshops (CV4Animals)*, 2025.
- M. Rodrigo**, C. Cuevas, N. García. "Text-guided sports highlights: a CLIP-based framework for automatic video summarization." *IEEE Access*, 2025.
- M. Rodrigo**, C. Cuevas, N. García. "Comprehensive comparison between vision transformers and CNNs for face recognition." *Sci. Reports* 14, 21392, 2024.
- M. Rodrigo**, C. Cuevas, D. Berjón, N. García. "Automatic highlight detection in videos of martial arts tricking." *Multimed. Tools Appl.* 83, 17109-17133, 2024.
- M. Rodrigo**, E. González-Sosa, C. Cuevas, N. García. "UPM-GTI-Face: Impact of distance and masks in face detection and recognition." *IEEE AVSS*, pp. 1-8, 2022.

AREAS OF EXPERTISE

- Deep Learning
- Computer Vision
- Multimodal Learning
- Face Recognition
- Video Summarization
- Action Recognition
- Vision Transformers
- CLIP / VLMs
- Object Detection
- Diffusion Models
- LLMs
- GPU Clusters
- Teaching