

JOSE LUIS MATEZ BANDERA, PHD

AI and Computer Vision Engineer

PhD with extensive experience in computer vision, AI, ML and robotics.
Passionate about driving progress through research and practical applications.

📍 Malaga, Spain

✉ joseluismtzbnd@gmail.com

🌐 [joseluismatez](#)

🌐 [josematez.github.io](#)



EDUCATION

Ph.D. in Mechatronics Engineering

Machine Perception and Intelligent Robotics
Group (MAPIR) - University of Malaga (Spain)

📅 2020 - 2025

Supervisor: Javier Gonzalez-Jiménez

Co-supervisor: Javier Monroy

- Cum Laude and International mentions.

M.Sc. in Mechatronics Engineering

University of Malaga (Spain)

📅 2019 - 2020

- GPA: 9.64 / 10.0 (Best GPA Award)
- Highest Honors: 3 out of 10 subjects
- Honors: 7 out of 10 subjects

B.Sc. in Robotics, Electronics and Mechatronics Engineering

University of Malaga (Spain)

📅 2015 - 2019

- GPA: 8.55 / 10.0 (Best GPA Award)
- Highest Honors: 17 out of 42 subjects
- Honors: 9 out of 42 subjects

TECHNICAL COURSES

Artificial Intelligence (24.20 ECTS)

Samsung Innovation Campus

📅 Fall 2020

- Final Project: [SkinScan](#), a deep learning model for skin lesions classification.

Machine Learning

Coursera (ID Credential: V57THSXGTWJA)

📅 Nov. 2019

LANGUAGES

Spanish
Mother tongue

English
Proficient

EXPERIENCE

Computer Vision & AI Engineer

Tupl Inc.

📅 Nov 2024 - Current

Tasks

- Computer vision expert responsible for the design and development of the company's AI Vision product.
- Integrating state-of-the-art CV/AI techniques to build robust quality-inspection solutions for manufacturing.
- Technical assessment of incoming projects: feasibility studies, scope definition, and effort estimation.
- Direct collaboration with clients to gather requirements, deploy solutions, and ensure successful on-site adoption.

Research Assistant

MAPIR Group, University of Malaga (Spain)

📅 2019 - Present

Tasks

- Research and development of computer vision and machine learning algorithms.
- Implementation and experimentation with cutting-edge AI/ML models.
- Teaching in computer science subjects and giving public presentations.

Highlights

- Recipient of competitive FPU grant.
- Publications in top-tier journals (RA-L, KBS) and presentations at international conferences (ICRA, CAIP).

R&D Computer Vision Engineer Intern

Ericsson Research, Stockholm (Sweden)

📅 Mar 2023 - Jun 2023

Tasks

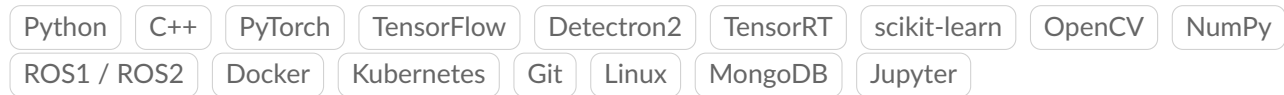
- Research and development of computer vision algorithms within a multidisciplinary team.
- Transfer of academic research into industrial prototypes.

Highlights

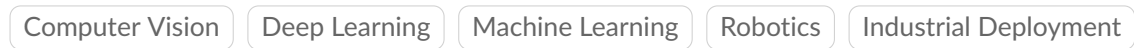
- Resulting work led to a journal publication (under review) and a patent.

TECHNICAL SKILLS

Technical Stack



Expertise & Domains



PUBLICATIONS/PATENTS

Most relevant publications are listed here. For all publications, check my [Google Scholar profile](#).

Journals

Cross-Detector Visual Global Localization with Coplanarity Constraints *Under Review in Pattern Recognition*.

Voxeland: Probabilistic Instance-Aware Semantic Mapping with Evidence-based Uncertainty Quantification *Under Review in IEEE Robotics and Automation Letters*.

Sigma-FP: Robot Mapping of 3D Floor Plans With an RGB-D Camera Under Uncertainty In IEEE Robotics and Automation Letters, 2022. Presented at IEEE International Conference on Robotics and Automation (ICRA 2023).

LTC-Mapping, Enhancing Long-Term Consistency of Object-Oriented Semantic Maps in Robotics In Sensors, 2022.

Efficient Semantic Place Categorization by a Robot through Active Line-of-Sight Selection. In Knowledge-Based Systems (Elsevier), 2022.

Conferences

Exploiting Spatio-Temporal Coherence for Video Object Detection in Robotics. In International Conference on Computer Analysis of Images and Patterns, 2022.

Patents

Determining Location of a Device within an Environment Comprising Planar Surfaces. *Under Review*.