



Juan Camacho Mohedano

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  [jucamohedano](#)

Research Interests

AI Agents, LLMs, VLMs

Education

Sep 2023 - . . . **University of Trento**, *MSc in AI Systems*.

Thesis: *TBA*

- ❖ Built a CNN-based powerlifting squat classifier (ResNet-18) with 92% test accuracy and collecting a 3D motion tracking dataset.
- ❖ Implementing MEMO with new test-time adaptation techniques to improve vision model performance.

2019 – 2022 **University of Leeds**, *BSc Computer Science with AI*.

First class.

Activities *Co-lead robotics team to compete in RoboCup.*

Thesis: *6DoF Robot Grasping*

Advisor: *Matteo Leonetti & Mehmet Dogar.*

2017 – 2019 **Marshalltown Community College**, *Associate of Arts*

GPA: 3.97/4.0

Work Experience

Jun 2024 – Jul 2024 **Freelance**

AI Engineer

- ❖ Enhanced and customized the open-source *RAGApp* to optimize vector search retrieval, implementing an efficient agentic workflow for improved contextual matching.
- ❖ Developed five educational notebooks on AI applications on image and text.

Jan 2023 – Jun 2023 **NEURA Robotics**, Bielefeld, Germany.

Robotics developer

Implemented ROS2 servers for low-level control automation, explored state-of-the-art grasping techniques, and collected an RGB dataset to train a YOLO model for object detection.

Skills

Coding Python [PyTorch, Transformers, vLLM], Docker
Languages Spanish, English

Competitions/Challenges

- 2024 **Hub Innovazione Trentino Challenge**, Trento, Italy
- 2024 **NASA International Space Apps**, *Honorable mention*, Treviso, Italy
- 2023 **FruitPunch AI**, Online.
- 2022 **RoboCup**, Bangkok, Thailand.
- 2021 **SciRoc**, Online.
- 2021 **RoboCup**, Online.
- 2020 **Robocup@Home Education Challenge**, Online.

Awards

- 2024 **AI Scholarship**, COVAP, Spain.
- 2020 **Robocup@Home Education Online Challenge**, *Gold Award*.