# Tomás Berriel Martins

## tberriel.github.io

PhD Candidate in Computer Vision Robotics, Computer Vision & Artificial Intelligence, University of Zaragoza

 $\bowtie tberriel@unizar.es$ 

## Interests and Objectives

My main area of interest lies on Deep Learning, Computer Vision, and 3D Geometry. I am particularly interested on the potential of implicit scene representations to complement traditional explicit representations and SLAM algorithms.

## Publications

- o [w1-c1] Ray-Patch: An Efficient Querying for Light Field Transformers. Tomás Berriel Martins, Javier Civera. Proceedings of the IEEE/CVF International Conference on Computer Vision Workshops & International Conference on 3D Vision (ICCV 2023 & 3DV 2024)
- o [c2] Feature Splatting for Better Novel View Synthesis with Low Overlap. Tomás Berriel Martins, Javier Civera. Proceedings of the British Machine Vision Conference (BMVC 2024)

# Work/Research Experience

#### 2022-Today Robotics, Computer Vision and Artificial Intelligence group (RoPeRT).

Predoctoral Researcher, funded by Gobierno de Aragón.

Research topics: Computer vision; 3D Geometry; Neural Representations would prefer to

have time.

Advisor: Javier Civera Zaragoza, Spain

#### The Computer Vision Group, University of Amsterdam.

(4 months) Visiting Researcher

Worked on building online open-vocabulary semantic 3D representations.

Supervisor: Assistant Professor Martin R. Oswald

Amsterdam, Netherlands

#### 2020–2021 Robotics, Perception & Real Time Group, University of Zaragoza.

(1 year) Research Engineer

Worked on Bayesian Neural Networks for uncertainty prediction in 360° images' layout

estimation.

Advisor: Professor Javier Civera

Zaragoza, Spain

2019–2020 **ITAinnova**.

(1 year) Robotics Research & Development Engineer Intern

Worked on a multidisciplinary team that developed autonomous platforms for both indoor

and outdoor environments. Supervisor: Javier Huarte

Zaragoza, Spain

## Educational Background

### 2021-Today Doctoral Program in Systems Engineering and Computer Science.

### University of Zaragoza

Research topics: Computer vision; 3D Geometry. Representation learning.

Advisor: Javier Civera

## 2020–2022 Master in Robotics, Graphics, and Computer Vision.

#### University of Zaragoza

Master's thesis: Learning disentangled representations of scenes from images.

Advisor: Javier Civera

## $2020 \ \ {\bf Artificial\ Intelligence\ Fundamentals}.$

ColumbiaX, edX

### 2015–2019 Bachelor's Degree in Electronic and Automatic Engineering.

#### University of Zaragoza

Bachelor's thesis: Automated human actions recognition in 3D video sequences.

Advisor: Professor Carlos Orrite

### Administrative roles

# 2023–Today Substitute of the Student's representative in the Doctoral School Steering Committee.

University of Zaragoza

# 2022–Today Student's representative in the Quality Committee of the Doctoral Program in the Systems Engineering and Computer Science.

School of Engineering and Architecture

## 2020–2022 Student's representative in the Masters' Quality Assurance Committee. School of Engineering and Architecture

# Languages

English Fluent

Italian Fluent

Spanish Native