Javier **Tirado-Garín**

PhD Student · Robotics, Computer Vision, and Artificial Intelligence Group · Universidad de Zaragoza (Spain)

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Education

PhD Student in Computer Vision

Universidad de Zaragoza — *Jan. 2023 - Now*

- 3D perception with Deep Learning and Geometry
- Supervised by Prof. Javier Civera in the Robotics, Computer Vision, and Artificial Intelligence Group

Double MSc in Industrial and Electronics Engineering

Universidad de Zaragoza — *2022*

- Advanced training in Electrical, Mechanical and Electronics Engineering
- GPA: 9.2 out of 10.0 - Ranked 1 out of 96 students

BSc in Industrial Technology Engineering

Universidad de Zaragoza — *2019*

- Training in Electrical and Mechanical Engineering - Strong background in Algebra and Calculus
- GPA: 8.6 out of 10.0 - Ranked 1 out of 127 students

Research Experience

Niantic Spatial — *London, UK*

Research Intern — *Sep. 2025 - Mar. 2026*

- Developed AutoCompass, an approach for training visual geo-localization models from noisy labels, easier to obtain at scale.

RoPeRT, I3A — *Zaragoza, Spain*

Research Intern — *Feb. 2021 - July 2021*

- Worked on continuous-time 6-DoF object tracking with RGB-D sensors

Publications

AutoCompass: Accurate Visual Localization on Public Maps by Learning from Weak Labels
J. Tirado, A. S. Paul, S. Chen, A. Barroso-Laguna, T. Cavallari, D. Turmukhambetov, V. A. Prisacariu, E. Brachmann
European Conference on Computer Vision (ECCV), 2026

AnyCalib: On-Manifold Learning for Model-Agnostic Single-View Camera Calibration
Javier Tirado, Javier Civera, *International Conference on Computer Vision (ICCV), 2025*

From Correspondences to Pose: Non-minimal Certifiably Optimal Relative Pose without Disambiguation
Javier Tirado, Javier Civera, *Computer Vision and Pattern Recognition (CVPR), 2024 -* ***Highlight***

DAC: Detector-Agnostic Spatial Covariances for Deep Local Features
Javier Tirado, Frederik Warburg, Javier Civera, *International Conference on 3D Vision (3DV), 2024*

Jacobian Computation for Cumulative B-Splines on SE(3) and App. to Continuous-Time Object Tracking
Javier Tirado and Javier Civera, *IEEE Robotics and Automation Letters (RA-L), 2022 - Presented at IEEE RSJ IROS, 2022*

Skills

Programming Python (Numpy, Pytorch, OpenCV, Numba...), C++, LaTeX and MATLAB
Tools Blender, Inkscape
Languages English and Spanish (Native)

Honors & Awards

2024 **Best Presentation Award**, at the International Computer Vision Summer School (ICVSS)
2023 **Double Extraordinary Master's Degree Award**, Awarded by the University of Zaragoza
2022 **FPU National Scholarship**, Funded by the Spanish Ministry of Universities
2020 **Extraordinary Bachelor's Degree Award**, Awarded by the University of Zaragoza