HENRIQUE PIÑEIRO MONTEAGUDO

henrique.pineiro2@unibo.it | henrique.gal | in henriqpm

Firenze, Italy | Santiago de Compostela, Spain

EXPERIENCE

Verizon Connect

Data Scientist and PhD Student

September 2022 - Present

Firenze, Italy

 Conducting research inside the data products team, which maintains and develops solutions running on hundreds of thousands of vehicles. Computer vision for ADAS applications. 3D and Bird's Eye View perception from monocular videos.

• École Polytechnique Fédérale de Lausanne (EPFL)

May 2022 - *August* 2022

Research Assistan

Lausanne, Switzerland

 Built a background extraction and super resolution pipeline to insert remote participants in TV programs as part of the AdMiRe EU project. Worked in the Multimedia Signal Processing laboratory under prof. Touradj Ebrahimi.

• Universidade de Vigo

September 2021 - February 2022

Research Assistant

Vigo, Spain

Multiple Object Tracking on edge platforms (NVidia Jetson) for the InfraROB EU research project.
Worked in the Applied Geotechnologies research group while doing my Master's Thesis.

EDUCATION

• Università di Bologna

November 2022 - Present

PhD in Computer Science and Engineering

Bologna, Italy

 Funded by the Marie Skłodowska-Curie Actions project SMARTHEP for real-time data analysis in science and industry.

• Universities of Vigo, Santiago, A Coruña and Porto

September 2020 - February 2022

MSc in Computer Vision

Spain and Portugal

One year and a half program with courses on both fundamental and andvanced computer vision topics.
Average grade: 9.6/10.

Universidade de Vigo

September 2016 - September 2020

BSc in Automation Engineering and Industrial Electronics

Vigo, Spain

Specialization in Automation Engineering.

PUBLICATIONS

A=PUBLISHED ARTICLE, P=PREPRINT

- [A.3] Henrique Piñeiro Monteagudo, Leonardo Taccari, Aurel Pjetri, Francesco Sambo, Samuele Salti. RendBEV: Semantic Novel View Synthesis for Self-Supervised Bird's Eye View Segmentation. Oral In 2025 IEEE/CVF Winter Conference in Applications of Computer Vision (WACV)).
- [P.1] Aurel Pjetri, Stefano Caprasecca, Leonardo Taccari, Matteo Simoncini, Henrique Piñeiro Monteagudo, Walter Wallace, Douglas Coimbra de Andrade, Francesco Sambo, Andrew David Bagdanov. A New Dataset for Monocular Depth Estimation Under Viewpoint Shifts. Presented at ECCV 2024 2nd Workshop on Vision-Centric Autonomous Driving (VCAD).
- [A.2] Andrea Benericetti, Niccolò Bellaccini, **Henrique Piñeiro Monteagudo**, Matteo Simoncini, Francesco Sambo. An object detection approach for lane change and overtake detection from motion profiles. In 2023 IEEE 26th International Conference on Intelligent Transportation Systems (ITSC).
- [A.1] Henrique Piñeiro Monteagudo, Rayan Daod Nathoo, Laurent Deillon, Changsheng Gao, and Touradj Ebrahimi. AI-based telepresence for broadcast applications. In *Proc. SPIE* 12226, 2022 *Applications of Digital Image Processing XLV*, 1222610.

LANGUAGES

- Spanish (Native)
- Galician (Native)
- English (Fluent)
- Italian (Fluent)