



Seminar Announcement

As part of the teaching of Computer Vision e Deep Learning, Laurea Magistrale - Ingegneria Informatica e Dell'Automazione

May 11, 2026, 14:30 – 16:30, Aula 145/4

HUMAN-CENTRIC VISUAL OBJECT TRACKING
Dr. Matteo Dunnhofer

Link to the Seminar: bit.ly/3Qc15rc

Università degli Studi di Udine, York University

Abstract

In computer vision, visual object tracking is the task of continuously localizing objects in videos. This talk will present recent advances from our research group in this area. It will first highlight the role of visual object tracking in enabling computer vision-based egocentric episodic memory systems, where objects are tracked to build structured representations of past user-centric visual experiences (WACV 2026). It will then examine the key challenges posed by this setting, showing that current object tracking methods are biased towards a third-person viewpoint rather than a human-like first-person point of view (ICCV 2025). Finally, the talk will discuss how comparing the internal representations of deep learning-based tracking algorithms with dynamic neural recordings in the primate brain could provide insights for designing more robust and human-inspired tracking architectures (preprint, 2026).

Bio



Matteo Dunnhofer is a Marie Skłodowska-Curie Postdoctoral Fellow between the University of Udine (Udine, Italy) and York University (Toronto, Canada). From the University of Udine, he received the BSc and MSc in Computer Science and the PhD in Industrial and Information Engineering. His research focuses on deep learning for computer vision. On these topics, he published several in international journals and conferences, and he organized workshops and tutorials. In 2021, he has been awarded for winning the Visual Object Tracking VOT2021 Long-term Challenge held at ICCV 2021. He also serves as reviewer for the most relevant journals and conferences in the field. He was recognized as an outstanding reviewer by CVPR 2025 and ECCV 2022. He is an associate editor for Pattern Recognition and The Visual Computer journals.

The seminar can be attended remotely (via the QR code link below), although in-person participation is recommended. All interested students are invited to attend. For further information, contact: Alessandro Galdelli (a.galdelli@univpm.it), Adriano Mancini (a.mancini@univpm.it).

