Team Possegger
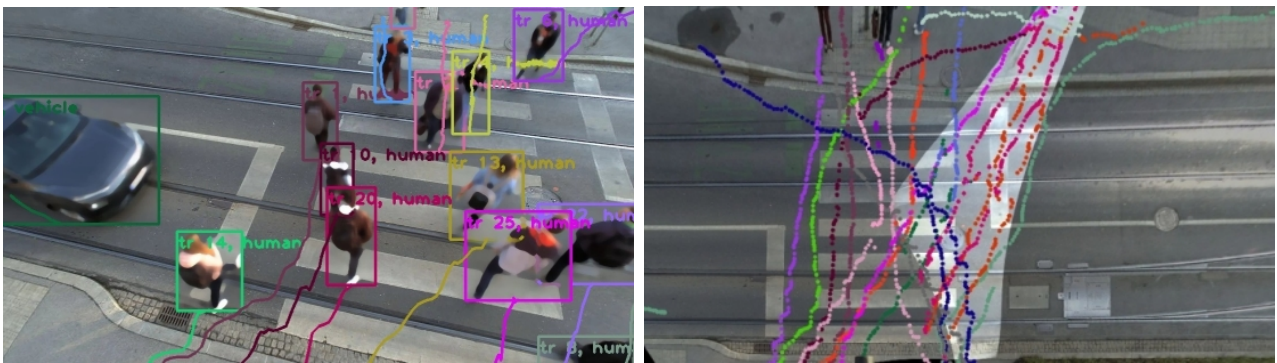*Institute of Visual Computing*
Graz University of Technology

Road User Trajectory Consistency in Multi-View Surveillance Systems

Bachelor Thesis / Seminar Project

Objective:

This project aims to advance traffic safety for vulnerable road users through the integration of multi-camera surveillance systems and supporting data-driven Smart City planning.

Your work will involve addressing core visual computing tasks, employing both classical computer vision methods and advanced AI/deep learning approaches to facilitate safer and smarter urban mobility solutions.

Qualifications:

- Experience in Python
- Interest in Computer Vision and Machine Learning
- Knowledge of deep learning frameworks is advantageous

To be investigated:

- YOLOv9:
  https://docs.ultralytics.com
- DeepSORT:
  https://github.com/nwojke/deep_sort
- SAMv2: https://ai.meta.com/sam2
- Smart Visual Surveillance System (Paper):
  DOI:10.1109/AVSS56176.2022.9959562

Contact:

Nadezda Kirillova
nadezda.kirillova@tugraz.at

Horst Possegger
possegger@tugraz.at