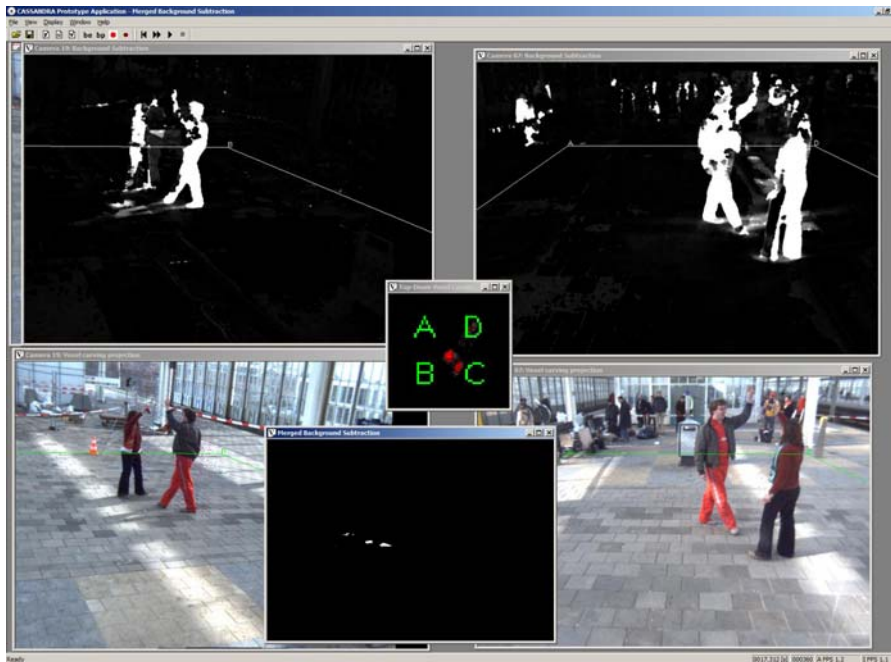


Looking at People: Multi-person tracking



The aim of this project is to recover and track the overall 3D (ground plane) position of multiple persons moving through a scene, as captured by multiple, overlapping cameras. The task involves various components

- Performing foreground segmentation step in each of the camera views
- Specifying an appearance model to capture how persons look like (e.g. in 2D or 3D)
- Mapping 2D information into 3D (e.g. volume carving, triangulation of medial axis of foreground region).
- Incorporating a recursive Bayesian estimator (e.g. Kalman filter, particle filtering)

The main challenge will be to robustly deal with person-person occlusion.

The experiments will be performed on the so-called CASSANDRA dataset – it contains several dozens of short sequences of people performing some type of activity at a train station, as captured by 3 synchronized (and calibrated) cameras.

Project guidance is by Prof. Dr. D.M. Gavrilu (www.gavrila.net), M. Hofmann and M. Liem.

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