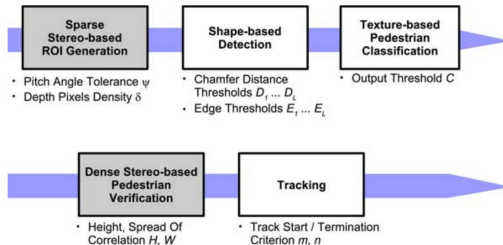


# Multi-cue Pedestrian Detection and Tracking from a Moving Vehicle

D. M. Gavrila and S. Munder (IJCV 2007)



- ▶ Multi-cue system for real-time detection and tracking of pedestrians from a moving vehicle
- ▶ Cascade of modules utilizing complementary visual criteria to narrow down the search space
- ▶ Integration of sparse stereo-based ROI generation, shape-based detection, texture-based classification and dense stereo-based verification
- ▶ Mixture-of-experts involving texture-based component classifiers weighted by the outcome of shape matching
- ▶  $\alpha - \beta$  tracker using the Hungarian method for data association
- ▶ Analysis of the performance and interaction of the individual modules
- ▶ Evaluation in difficult urban traffic conditions