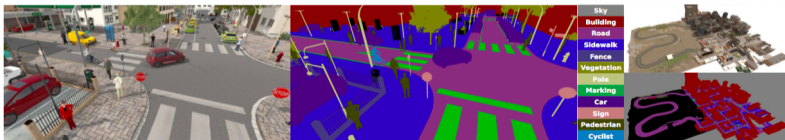# The SYNTHIA Dataset: A Large Collection of Synthetic Images for Semantic Segmentation of Urban Scenes

G. Ros, L. Sellart, J Materzynska, D. Vazquez, A. M. Lopez (CVPR 2016)

- ▶ Proposes to use a virtual world to automatically generate realistic synthetic images with pixel-level semantic segmentation annotation

- ▶ Contributions:
  - ▶ A new dataset SYNTHIA, for semantic segmentation of driving scenes with more than 213,400 syn- thetic images including both, random snapshots and video sequences in a virtual city
  - ▶ Images are generated simulating different seasons, weather and illumination conditions from multiple view-points
  - ▶ Experiments showed that SYNTHIA is good enough to produce good segmentations by itself on real datasets, dramatically boosting accuracy in combination with real data.