

# Dynamic 3D Scene Analysis from a Moving Vehicle

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- ▶ Presents an integrated system for dynamic scene analysis on a mobile platform
- ▶ Contributions:
  - ▶ Presents a multi-view/multi-category object detection module that can detect objects
  - ▶ Shows how knowledge about the scene geometry can be used to improve recognition performance and to fuse the outputs of multiple detectors
  - ▶ Demonstrates how 2D detections can be integrated over time to arrive at accurate 3D localization of static objects
  - ▶ In order to deal with moving objects, proposes a tracking approach which formulates the tracking problem as space-time trajectory analysis followed by hypothesis selection.
- ▶ Evaluates on 2 video sequence datasets introduced in the paper