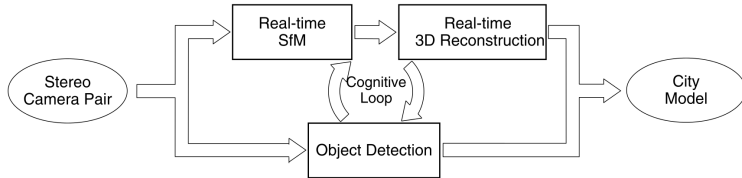


# 3D Urban Scene Modeling Integrating Recognition and Reconstruction

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- ▶ Fast and memory efficient 3D city modelling
- ▶ Application: a pre-visualization of a required traffic manoeuvre for navigation systems
- ▶ Simplified geometry assumptions while still having compact models
  - ▶ Adapted dense stereo algorithm with ruled-surface approximation
- ▶ Integrating object recognition for detecting cars in video and then localizing them in 3D (not real-time yet)
- ▶ 3D reconstruction and localization benefit from each other.
- ▶ Tested on three stereo sequences annotated with GPS/INS measurements