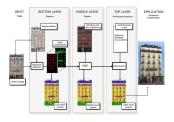
## ATLAS: A Three-Layered Approach to Facade Parsing M. Mathias, A. Martinovié, L. V. Gool (IJCV 2016)



- Semantic segmentation of building facades
- ▶ Three distinct layers representing different levels of abstraction:
  - Segmentation into regions with probability distribution over semantic classes
  - Detect objects to improve initial labeling with object detector
  - ▶ Combination of segmentation and object detection with a CRF
  - Incorporate additional meta-knowledge in form of weak architectural principles which enforces architectural plausibility
- Outperform state-of-the-art on ECP and eTRIMS dataset
- Output of highest layer used for procedural building reconstruction