

Object-level Priors for Stixel Generation

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- ▶ Existing stixels representations are solely based on dense stereo and a strongly simplifying world model with a nearly planar road surface and perpendicular obstacles
- ▶ Whenever depth measurements are noisy or the world model is violated, Stixels are prone to error
- ▶ Contributions:
 - ▶ Shows a principled way to incorporate top-down prior knowledge from object detectors into the Stixel generation
 - ▶ The additional information not only improves the representation of the detected object classes, but also of other parts in the scene, e.g. the freespace
- ▶ Evaluates on stereo sequence introduced in the paper