

monocular depth estimation

unsupervised

ego motion and depth estimation based on monocular video

- 1、Unsupervised Learning of Depth and Ego-Motion from Video (CVPR 2017 Oral/[open source](#))
- 2、Unsupervised Learning of Depth and Ego-Motion from Monocular Video Using 3D Geometric Constraints
- 3、Learning Depth from Monocular Videos using Direct Methods (CVPR 2018/[open source](#))
- 4、GeoNet: Unsupervised Learning of Dense Depth, Optical Flow and Camera Pose (CVPR 2018/[open source](#))
- 5、Unsupervised Learning of Monocular Depth Estimation and Visual Odometry with Deep Feature Reconstruction (CVPR 2018/[open source](#))
- 6、Depth Prediction Without the Sensors: Leveraging Structure for Unsupervised Learning from Monocular Videos (AAAI 2019/[open source](#)/[SOTA](#))
- 7、Unsupervised Monocular Depth and Ego-motion Learning with Structure and Semantics (CVPR 2019/[open source](#))
- 8、Competitive Collaboration: Joint Unsupervised Learning of Depth, Camera Motion, Optical Flow and Motion Segmentation ([open source](#))
- 9、Depth from Videos in the Wild: Unsupervised Monocular Depth Learning from Unknown Cameras
- 10、A Deeper Insight into the UnDEMoN: Unsupervised Deep Network for Depth and Ego-Motion Estimation
- 11、SfMLearner++: Learning Monocular Depth & Ego-Motion using Meaningful Geometric Constraints
- 12、Epipolar Geometry based Learning of Multi-view Depth and Ego-Motion from Monocular Sequences

single image depth estimation

supervised

SOTA algorithm

- 1、Deep Ordinal Regression Network for Monocular Depth Estimation ([SOTA](#) for Monocular Depth Estimation on KITTI Eigen split/[open source](#))
- 2、High Quality Monocular Depth Estimation via Transfer Learning ([SOTA](#) for Monocular Depth Estimation on NYU-Depth V2/[open source](#))