

Attention Mechanism-based Monocular Depth Estimation and Visual Odometry

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- Propose a depth estimation network encoder based on attention mechanism for predicting the spatial features of the adjacent frames.
- Improve the depthwise separable convolution to replace the convolution layers in the main architecture for improving efficiency.
- Validate the performance of our algorithm on a public dataset and real-world experiments with our mobile robot, including outdoor and indoor with ground truth.

