

Robust Semantic Segmentation for Street Fashion Photos

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Abstract—In this paper, we aim to produce the state-of-the-art semantic segmentation for street fashion photos with three contributions. Firstly, we propose a high-performance semantic segmentation network that follows the encoder-decoder structure. Secondly, we propose a guided training process using multiple auxiliary losses. And thirdly, the 2D max-pooling-based scaling operation to produce segmentation feature maps for the aforementioned guided training process. We also propose mIoU+ metric taking noise into account for better evaluation. Evaluations show that the proposed network achieves high benchmark result in ModaNet with less computational cost compared to ever-proposed methods.

Keyword—semantic segmentation, street fashion photos, label pooling, mIoU+



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