### Title
Multi-scale Subnetwork for RoI Pooling for Instance Segmentation

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### Abstract
Instance segmentation is a challenging task in computer vision because object locations in an image must be predicted and segmentation must be performed inside these locations. In the present paper, we propose a new pooling module to extract a small feature map from each Region of Interest for pixel-level prediction. Instead of using RoIAlign pooling, we use a small network module and ensemble the extracted multi-scale features in a feature map. The proposed method can output a better feature map and therefore better pixel-to-pixel alignment between input and output. The results of an experiment reveal that the proposed method outperforms cutting-edge instance segmentation methods.