Hierarchical Dense Correlation Distillation for Few-Shot Segmentation

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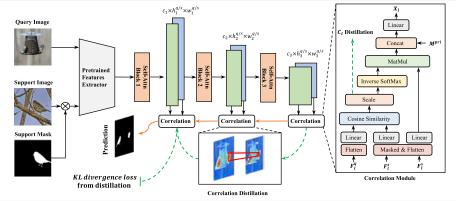


(Highlight)



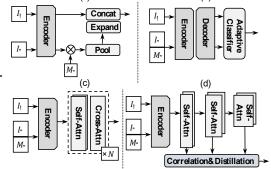
Schematic Overview

- Decoupled downsampling & matching
- Matching module
- Hierarchical correlation map distillation



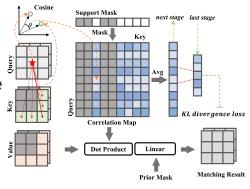
Related Work

- 1) Prototype-based
- 2) Adaptive-classifier
- 3) Feature matching
- 4) Our HDMNet



Matching Module

The matching module based on correlation mechanism and distillation.



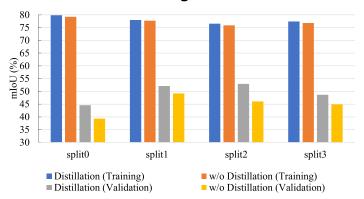
Performance

50.0%

We achieve 50.0% mIoU on COCO-20i unseen categories in one-shot setting

Ablation Comparison

Ablation study on correlation map distillation for training and validation



Visualization Results

Reduce train-set overfitting and introduce correlation distillation leveraging semantic correspondence from coarse resolution to the fine-grained.

