MULTI-LOSS CONVOLUTIONAL NETWORKS FOR GLAND ANALYSIS IN MICROSCOPY
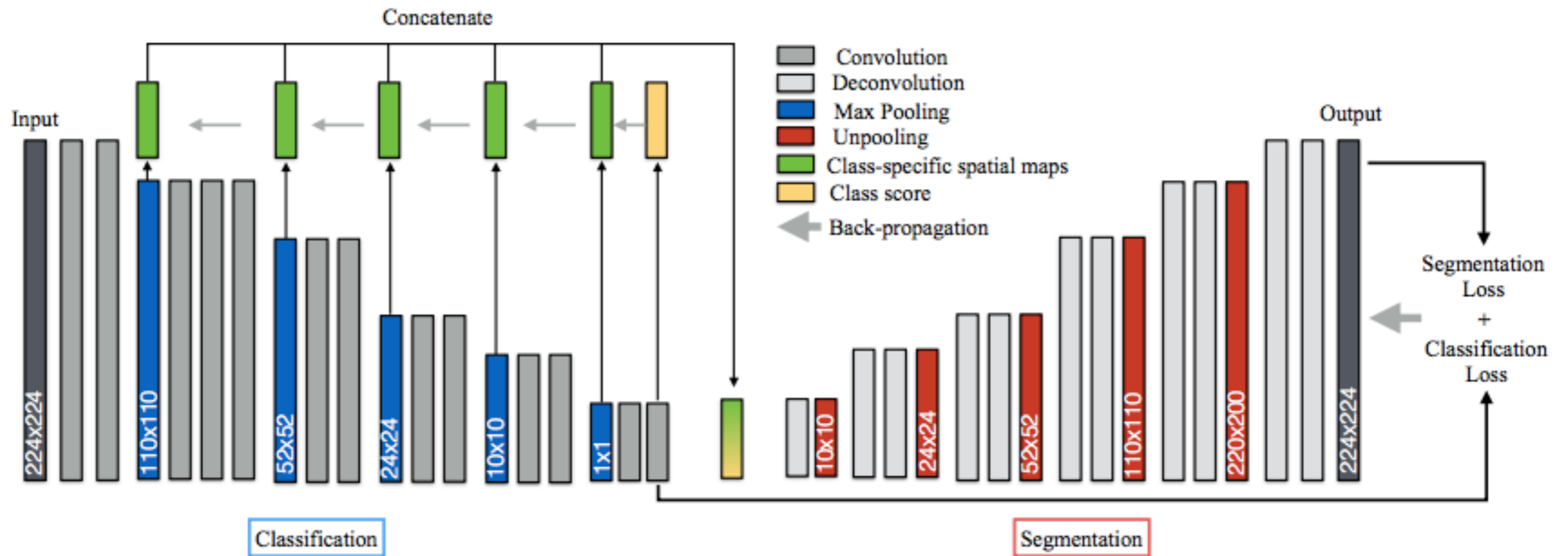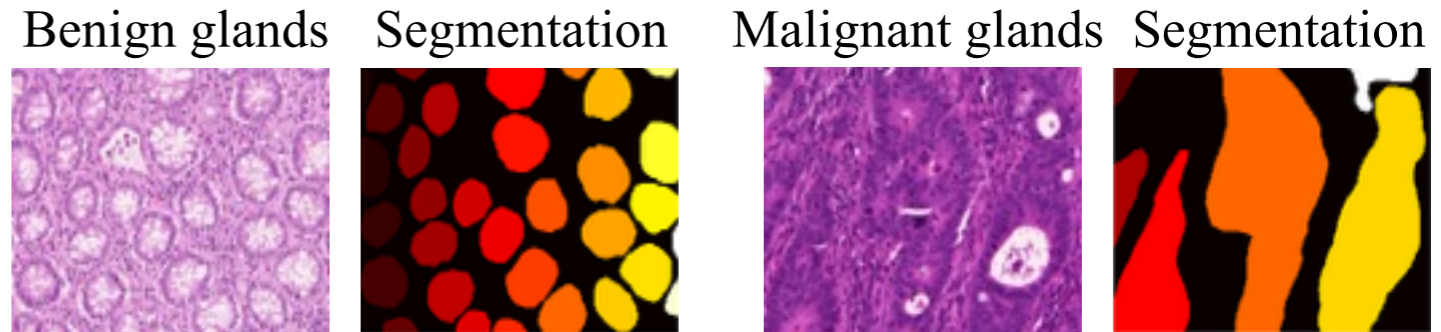
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Gland segmentation is often a pre-requisite for automatic cancer diagnosis.
This study evaluates if class information (e.g benign vs malignant) should influence segmentation.

Benign glands   Segmentation   Malignant glands   Segmentation

Evaluation on 80 benign and malignant colon adenocarcinoma:
+6 to 13% in object Dice.
+3 to 6% in classification accuracy.