



Multi-class Skin Lesion Segmentation for Cutaneous T-cell Lymphomas on High-Resolution Clinical Images



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Previous Skin Lesion Segmentation Task

2 Classes (Only lesion and normal skin)

Disease: localized solitary skin lesion

Modality: mostly dermoscopy, few clinical

Characteristics:

- (1) Only one skin lesion part
- (2) Lesion part appears in the center
- (3) Similar background
- (4) Low to medium resolution



This New Segmentation Problem

4 Classes (Three visually similar classes)

Disease: generalized skin lesion

Modality: clinical

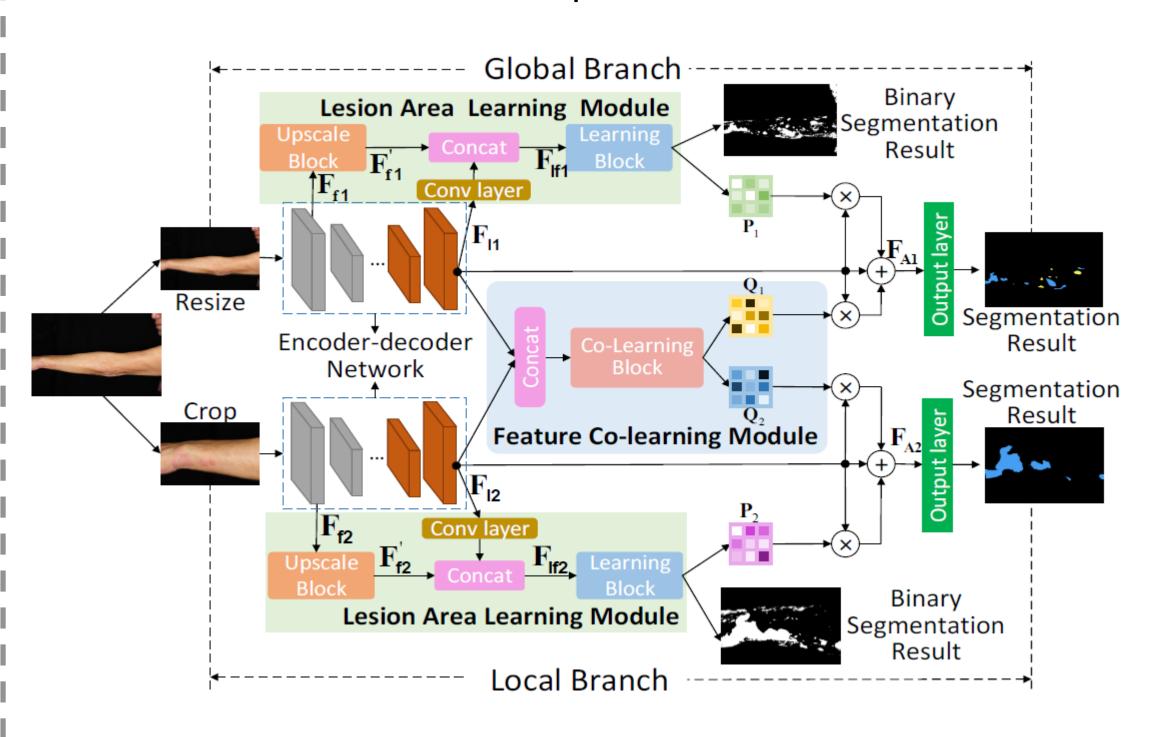
Characteristics:

- (1) Multiple skin lesion parts
- (2) Lesion parts are widely scattered
- (3) Large variety of background
- (4) High resolution





Our Proposed Method



First paper to focus on the segmentation task for CTCL

A new dataset with clinical images

A new method based on the characteristics of CTCL

State-of-the-art result on the new dataset