

- Task: Pixelwise, instance-level, maybe multi-class
- Difficulties:
 - Object Feature + Spatial Information
 - #Instance unknown
 - Dense objects

- Detection + Segmentation
 - Mask R-CNN: The Paradigm
- Semantic based
 - Deep Contour^[1], etc.

[1] Chen, H., Qi, X., Yu, L., & Heng, P. A. DCAN: *Deep Contour-Aware Networks for Accurate Gland Segmentation*.