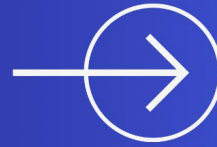




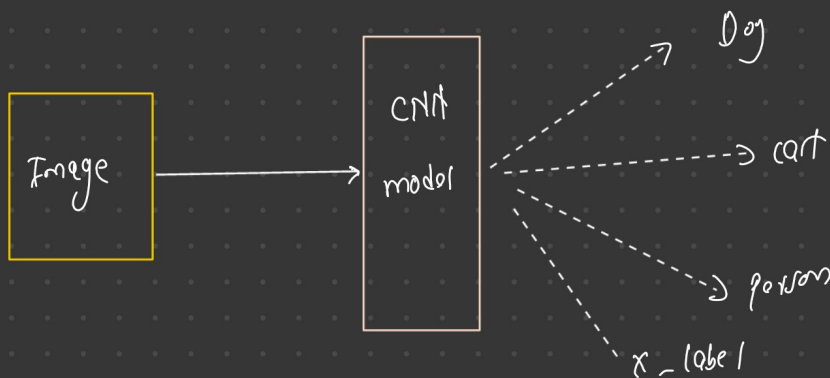
Introduction To Image Segmentation



www.krishnaik.in

Image Segmentation — is a computer vision technique that partitions an image into multiple segments or regions to simplify its representation & make analysis more meaningful.

Image Classification



Object Detection

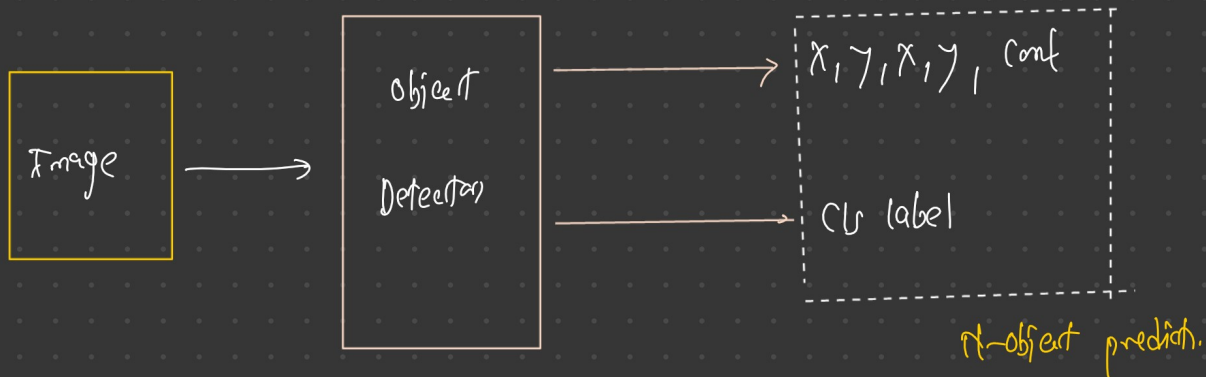
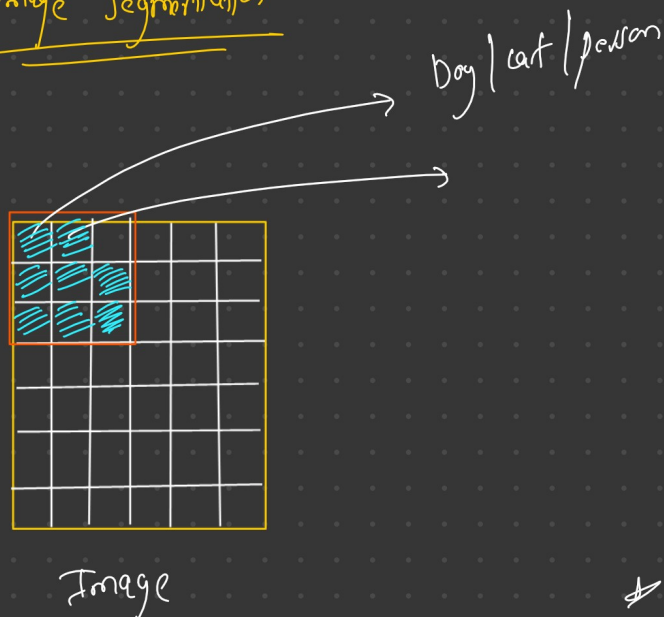


Image Segmentation

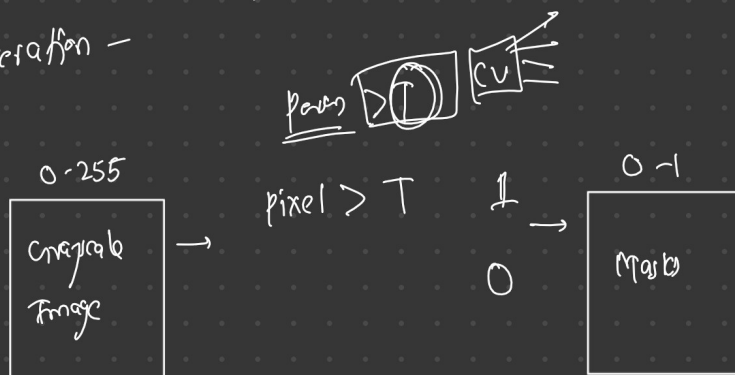


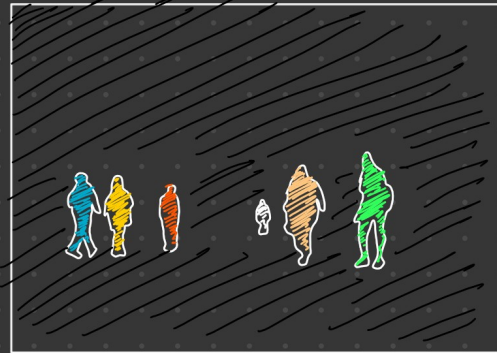
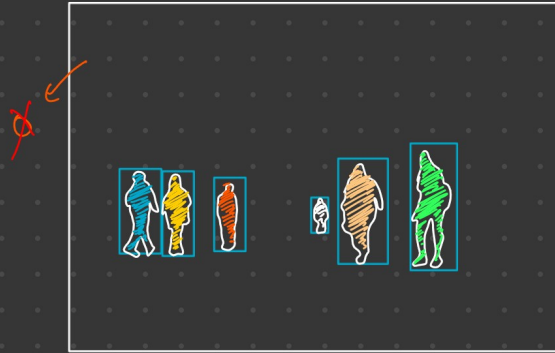
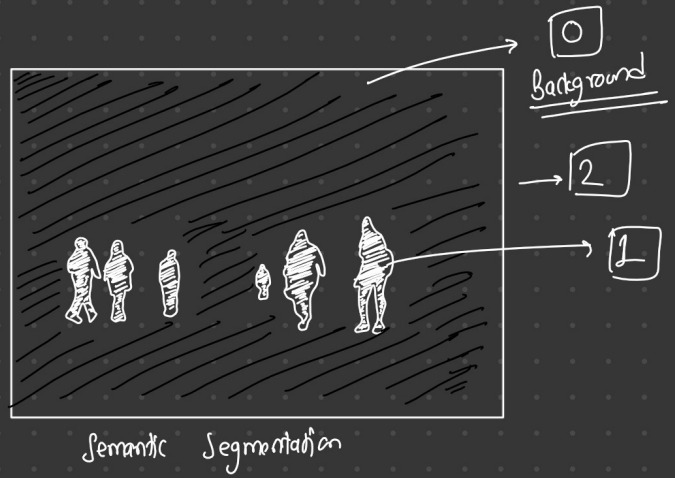
problem segmentation solves

- ★ Accurate object boundaries -
- ★ Foreground vs Background separation -
- ★ Feature detection

Real world use cases:-

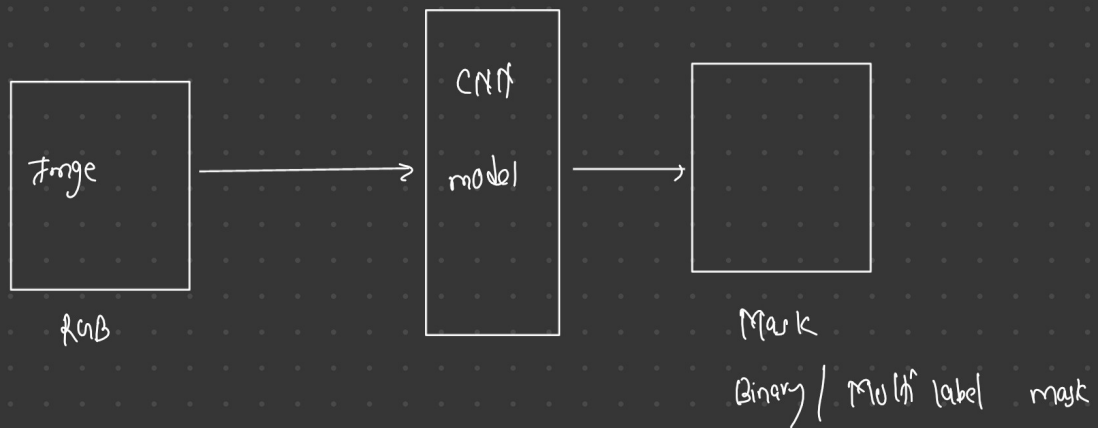
- ★ Medical Imaging
- ★ Self-Driving cars
- ★ Agriculture -
- ★ Satellite imaging -
- ★ AR



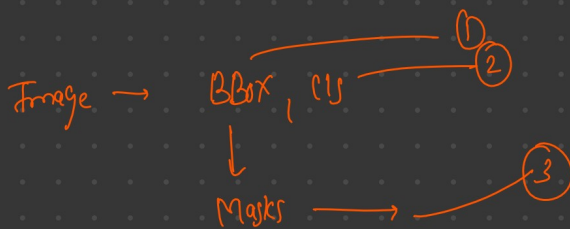
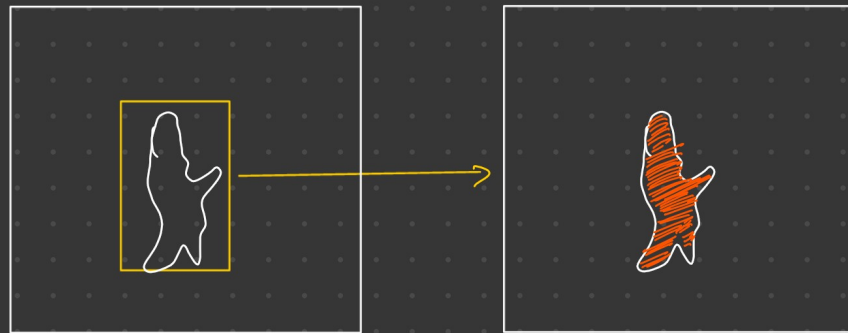
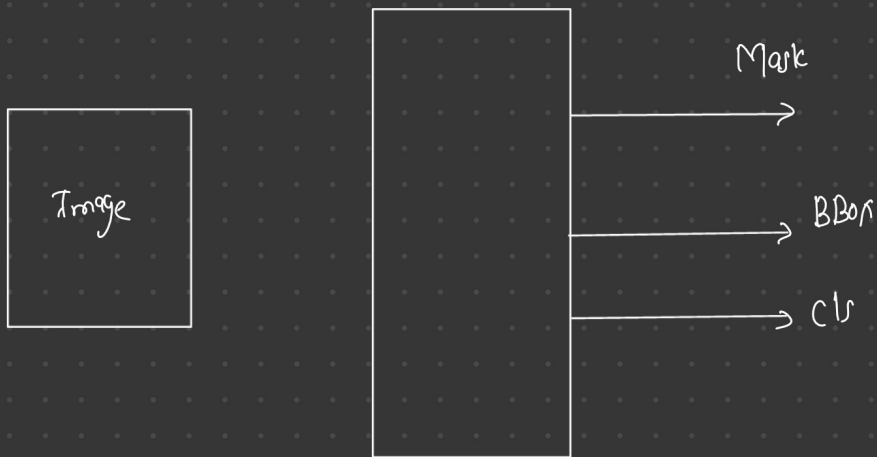


Semantic Segmentation:

— classifying each pixel in an image



Instance Segmentation



Instance Segmentation \rightarrow Object Detection + Semantic Segmentation

Semantic Segmentation \rightarrow Instance Segmentation + Semantic Segmentation