OAR Segmentation

# Challenges

Every subject has all the organs, but the dataset has annotations missing. This means that training basic supervised training for multi-organ segmentation would lead to lots of False Negatives.

# Ideas

1. One has to start with Unet (obviously 3D). Let’s see what it does and confirm the effect of the underlying problem.

2. Set up “Backprogate gradients for only confident annotations” along with “curriculum learning” along “self-supervised learning”.

3. Unet with auxilliary losses in the upsampling path

4. Unet with auxilliary predictions fed back to the upsampling path

5. Think of something for active contours in neural networks, conditional random fields, refinement network, boundary loss term

# To ask

rr, cc in create\_mask