

Explore MRI data

Video: Medical Image Segmentation

51 sec

Lab: Explore MRI data

1h

Image segmentation

Video: MRI Data and Image Registration

3 min

Video: Segmentation

3 min

Lab: Get a sub section

1h

Reading: Convolutional Neural networks

10 min

Video: 2D U-Net and 3D U-Net

2 min

Reading: More about U-Net (Optional)

10 min

Lab: Implement U-Net

1h

Video: Data augmentation for segmentation

2 min

Video: Loss function for image segmentation

3 min

Practical considerations

Video: Different Populations and Diagnostic Technology

1 min

Video: External validation

2 min

Video: Measuring Patient outcomes

3 min

Quiz week 3

Programming: 3D Image Segmentation

Summary of AI for Medical Diagnosis



More about U-Net (Optional)

For a brief video introduction to U-Net by the original creators, Olaf Ronneberger, Philipp Fischer, Thomas Brox, please visit their site [U-Net: Convolutional Networks for Biomedical Image Segmentation](#).

If you would like more detail, start with this blog post by [Heet Sankesara “UNet”](#).

To go deeper, you can read the original research paper [U-Net: Convolutional Networks for Biomedical Image Segmentation](#) by Olaf Ronneberger, Philipp Fischer, Thomas Brox

As a reminder, you will be using a pre-trained U-Net model, and so you can still complete this course without knowing the specific details of implementing the U-Net from scratch.

✓ Complete

Go to next item

