

Vision Planning

Breakdown

- Identify and Lung Area
 - Find computer vision tools/techniques
 - Compare tools/techniques
 - Setup workspace
 - Plan using found techniques
 - Implement plan
 - check results
- Identify Infection
 - TODO

MoSCoW

Must have

The computer must be able to identify the lung area in an x-ray. This area must at least be labelled.

Should have

The computer should be able to crop and remove - or place a filter over - the pixels outside the lung area.

Could have

After cropping the images, the computer could train a neural network on the images to recognize viral or bacterial infection.

Will not have

A neural network will not be used to crop the images, since there is no data available to train this on. It would be too much work to label all the images by hand beforehand.

Planning

Week 1, 2

Finish exercises “Kleuren, Histogrammen en Features”, “Convoluties”, “Mapping en LinAlg” and “Classificatie, Segmentatie, Object Recognition”.

Week 3

Finish the last exercise “Neurale Netwerken”.

Start looking for some Computer Vision techniques that might be useful for the kaggle challenge, create an overview with links to papers, websites.

Week 4

Create a plan for implementing the computer vision program. Start implementing this plan. If necessary, keep updating this plan if something might not work.

Week 5

Continue implementing the plan. If the program is working, continue with a small setup for a neural network.

Week 6

TBD