Paper 1: Medical Images Segmentation for Lung Cancer Diagnosis Based on Deep Learning Architectures

This paper focuses on using 3D segmentation to find tumors and then classify them as either benign or malignant. The segmentation process is based on the UNETER model. Most papers published in 2023-2024 reference the Decathlon dataset which was used in a competition. The system performed really well according to its standards.

Link to Paper

Paper 2: Lung Tumor Image Segmentation from Computer Tomography Images Using MobileNetV2 and Transfer Learning

This paper focuses again on 3D segmentation. However this paper uses a different model as it used MobileNetV2 as an encoder and UNET for feature extraction. A pre-trained MobileNetV2 is used with transfer learning. A DICE system is implemented and the Dice score can be used to evaluate the similarity between a predicted segmentation mask and the ground truth segmentation mask.

Link to Paper

Paper 3: Deep learning ensemble 2D CNN approach towards the detection of lung cancer

This paper focuses on a 2D Conv Net for 2D slices of CT scans. 3 different layers of Conv Nets were put together with different layers and pooling techniques. This resulted in a model of 95% accuracy that surpassed the baseline model.

Link to Paper