Lung Segmentation in Chest X-rays with Res-CR-Net

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Deep Neural Networks (DNN) are widely used to carry out segmentation tasks in biomedical images. Most DNNs developed for this purpose are based on some variation of the encoder- decoder U-Net architecture. Here I show that Res-CR-Net, a novel type of fully convolutional neural network, which was originally developed for the semantic segmentation of microscopy images, and which does not adopt a U-Net architecture, is very effective at segmenting the lung fields in chest X-rays from either healthy patients or patients with a variety of lung pathologies.

Awards Won:

Third Award of $1,000