



Medical Imaging meets Deep Learning

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Training Deep Networks with Less Manual Annotation

In the era of deep learning, most techniques are data hungry and work well when large-scale labeled datasets are available. However, in some domains, i.e. the medical domain, labeled data is hard to get since it requires expert annotators. In this talk, we will discuss interactive techniques in collecting labels, particularly focusing on segmentation. Interactive methods aim to produce labels automatically, but allow human annotators to interfere and correct the errors efficiently. We will also discuss another line of work which aims at exploiting weak labels such as tags and text. For example, imagery may be paired with medical reports, which contain important information to train better image recognition models. If time, we will also discuss recent work on few-shot learning.

Reading: <https://arxiv.org/abs/1703.03400>