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Contribution - Active Learning for Multilabel Classification of Medical Images

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Abstract

Tired of labeling your data? Active learning aims to reduce the annotation load by selecting the most informative observations to label in order to reach the best classifier performance with as few images as possible. However, designing such smart labeling strategies is a nontrivial task with a number of challenges.
In this submission we focus on active learning for multilabel classification, where an image can have multiple biomarkers at the same time. We will discuss the problems arising from training neural networks on data sets with a few labeled observations as well as various sampling strategies tested on a number of medical image data sets.