Machine Learning in Electrocardiogram Diagnosis

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Abstract

The talk will focus on different approaches to electrocardiogram (ECG) analysis: from rule-based methods to deep learning. In particular, we will consider two approaches to the ECG segmentation - one of them exploits wavelet transforms (rule-based method) and another uses UNET-like neural networks - and different architectures of neural networks for ECG classification. We will discuss the advantages and disadvantages of different approaches and see which method is best used depending on the size of the training set and on other characteristics.