Abstract

The aim of the thesis was to use deep learning methods for recognizing text-books and classifying their subject and level, based on text parameters, like name of the book, author, publisher or brief content description. As part of the thesis, we formulate custom definition of textbook, create a dataset by extracting data from source available on the internet and manually label train and test dataset. We use naive bayes classifier as a baseline and then neural networks with convolutional, recurrent or combined architectures. We compare various methods of representing data with vectors (word embedding) and analyze the results in detail. Resulting best model reaches high accuracy in all three tasks which suggests the possibility of its application in practice.