

ABSTRACT

The theme: “Checking title similarity for product matches using artificial neural networks”.

Diploma thesis involves: 63p., 14 tables, 15 fig., 2 add. and 24 references.

NEURAL NETWORKS, PRODUCT MATCHING, TEXT SIMILARITY, E-COMMERCE, PYTHON

The purpose of this work is to create an e-commerce platform product matchings using artificial neural networks for automated price monitoring systems. This paper considers MatchPyramid model and Text Similarity approaches using convolutional neural networks.

Model was trained on 1.5 million dataset of title pairs, model accuracy is checked using standard classification model metrics, such as precision, recall and F1 score.

This paper contains model efficiency research while working with English-only and mixed (original titles). The inputs are title pairs from different e-commerce platforms, output is estimation of successful matching likelihood among two titles.