

Poznań, dnia 14.04.2023

Jakub Pokrywka

## Abstract of doctoral thesis in English

Abstract of doctoral thesis Optimization and Evaluation in Machine Learning Challenges  
(Optymalizacja i ewaluacja w wyzwaniach uczenia maszynowego):

To develop new machine learning methods, it is necessary to evaluate them reliably. This doctoral thesis discusses some aspects of preparing machine learning challenges and techniques for developing their solutions. The work consists of seven papers published in international conference proceedings concerning natural language processing, computer vision, and time series forecasting. The thesis author is the sole author of three of them, the first author of three others, and a second author of the remaining one. Three papers introduce new challenges, describing the methodology of dataset acquisition, preparation of dataset splits, choice of evaluation metric, and preparation of baselines. One paper reports the improvement of an existing challenge and evaluates various methods for it. The remaining three papers provide solutions to existing challenges, including model optimization techniques.

Jakub Pokrywka

