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Prediction of athletes' performance results using machine learning algorithms

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In the paper, we present the machine learning algorithm to predict 100m men's outdoor sprint score. For this project, a unique dataset of 17 features was created. The training set contained 174,383 records, whereas the test set contained remaining 406,894 records (proportions: 30% of training data to 70% of test data). The proposed multi-layer MLP model is based on set of features, such as weather conditions, locations of competition and athlete's personal information. The achieved method performance was 78% in term of accuracy, with 0.13s tolerance.

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