

INF264 Project 3

DIGIT RECOGNIZER - SUMMARY

Sophie Blum and Benjamin Friedl — 30.10.2020

In this project, we computed different machine learning solutions to classify handwritten digits based on a given dataset. This included pre-processing the data as well as training different kinds of models with different values for chosen hyper-parameters. Whilst we also tested a K-Nearest-Neighbour-Classifer and a Support-Vector-Machine-Classifer, the best results were produced by a Convolutional Neural Network. With an accuracy of 98.09% on an unseen test-dataset, this turned out to be a viable approach for this task. The expected performance in real life is expected to be smaller, but in a similar range, as the performance on the test data is usually an overestimation of the model as well.