

Comparison of Multiclass Kernel Support Vector Machines and Neural Networks for Image Classification

Kernel-based Machine Learning and Multivariate Modeling - project

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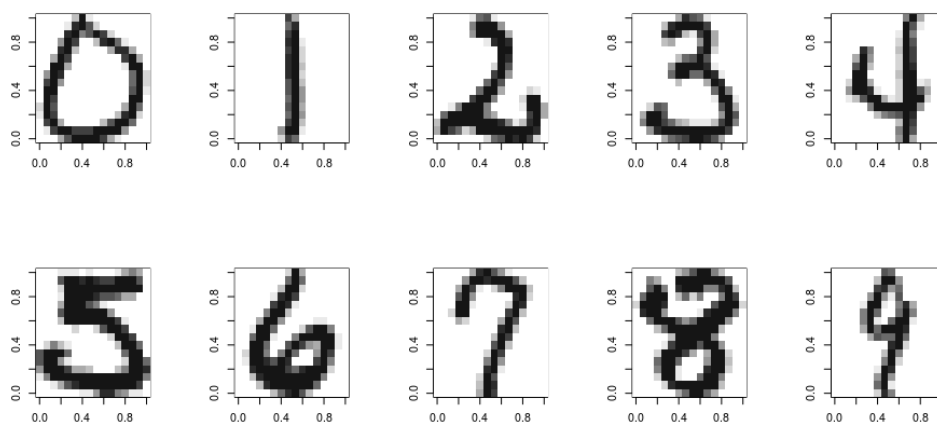
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1 Introduction

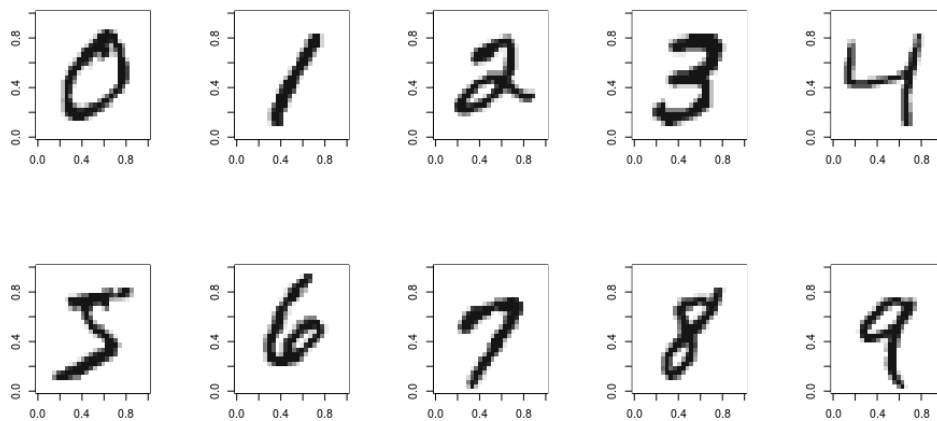
1.1 task

1.2 datasets

1.2.1 ZIP



1.2.2 MNIST

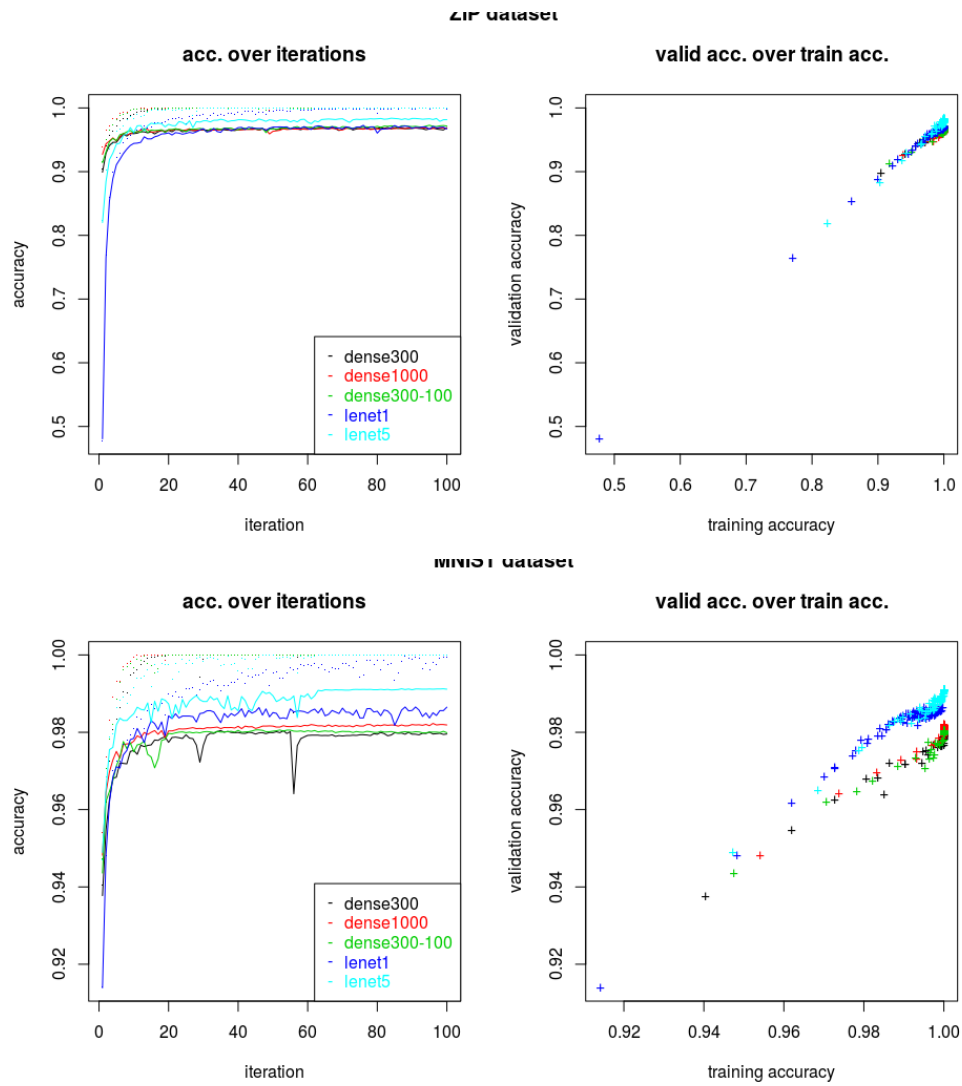


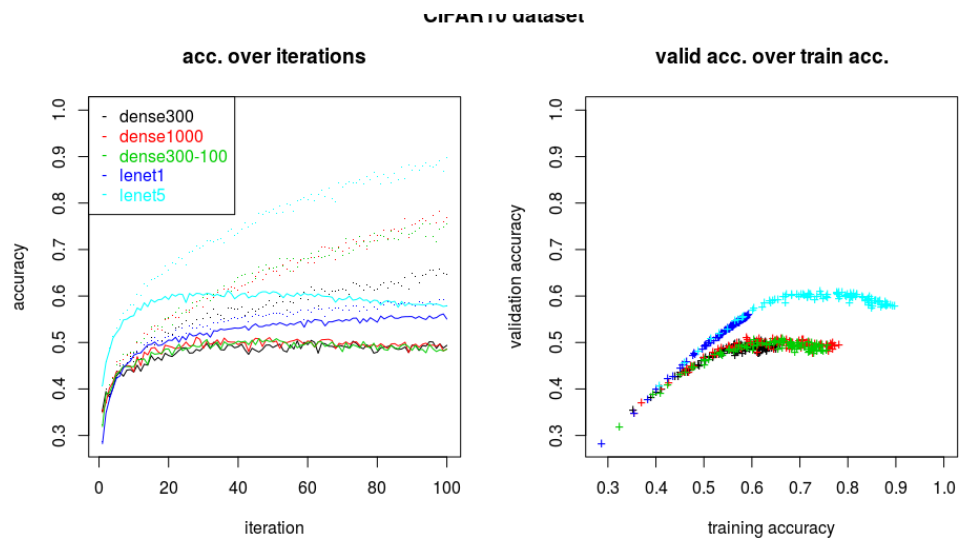
1.2.3 CIFAR10

2 Neural Networks

2.1 architectures

2.2 results





2.3 state of the art

3 Multiclass Kernel SVMs

3.1 Multiclass SVM strategies

3.2 Parameter optimization

3.3 Results

4 Conclusions

4.1 Difficulties of the datasets

4.2 Comparison of Neural Networks and SVMs

5 Application

5.1 Description

5.2 Manual