

CS F441 – Selected Topics from Computer Science

Assignment – 1

Submission date: 2359hrs 28/10/2020

- We have learnt that the design and architectural decisions that are taken while building the deep learning models play a vital role in the performance of the resultant models.
- Build 12 deep learning models by taking sensible and knowledgeable design and architectural decisions for MNIST dataset
- Build 4 learning models using suitable traditional approaches like SVM, logistic regression etc.
- Perform a comparative study of these 16 models.
- Provide reasoning for superior/medium/inferior performance of these 16 models.
- The report should detail each model with design & architectural decisions and the sensitivity analysis of the underlying hyper parameters. The results and all other details should be articulated in the report.
- MNIST dataset can be downloaded from the following link:
<https://www.kaggle.com/oddrational/mnist-in-csv>
- This is a group project and maximum of 3 students are allowed in each group.

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