

Homework 1

Deep Learning (IST, 2024-25)

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Fall 2024

November 29, 2024

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Group Contributions

The assignment is a joint contribution of X, Y. The set up of the repository was an endeavour undertaken by X. The assignment itself was tackled in the following manner, X, Y, X, Y. The a theoretical analysis, proofs, and written explanations for Problems 1-3 were an andeavor underwent by X, Y. The compilation of the results and formating the solutions in L^AT_EX and ensured all work was clearly presented was by X.

1 Landscape classification with linear classifiers and neural networks

1.1 Part 1

[Your solution for 1a]

1.2 Part 2

[Your solution for 2a] [Your solution for 2b] [Your solution for 2c] [Your solution for 2d]

1.3 Part 3

[Your solution for 3a]

2 Landscape classification with an automatic differentiation toolkit

2.1 Part 1

[Your solution for 2a]

2.2 Part 2

[Your solution for 2b]

3 Multi-layer perceptron with activations

3.1 Part 1

[Your solution for 1]

3.2 Part 2

[Your solution for 2]

3.3 Part 3

[Your solution for 3]

3.4 Part 4

[Your solution for 4]