

Thesis Changes Log

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PhD Program: Computational and Data Science and Engineering

Title of Thesis: Applications of Differential Equations and Reduced-Order Modeling for Deep Learning

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Co-supervisor: Prof. Andrzej Cichocki

The thesis document includes the following changes in answer to the external review process.

- Fixed many typos, fixed wrong references, moved external links into footnotes, removed incorrect references to the supplementary materials, fixed formatting issues, and removed duplicate bibliography references throughout the whole text.
- In Chapter 2, added details about the architecture of example 2.1.
- In Chapter 3, added information about the recommended normalization setting.
- In Chapter 4, introduced robust accuracy, removed the redundant definition of the RK methods, and removed mentions of white-box attacks.
- In Chapter 5, added architecture details for Figure 5.1, fixed Algorithm 1, and added details about dealing with batch normalization.
- In Chapter 6, fixed Algorithm 4, notation for equation (6.16), and added comment about the recursive projection method.