Restructuring Neural Networks for Verification

Tobias Ladner

Prof. Dr.-Ing. Matthias Althoff Cyber-Physical Systems Group Technische Universität München

July 14th, 2022

Topic 1: Restructuring Neural Networks

Application: Verification of Neural Networks Smaller networks are usually easier to verify. Restructuring can help to decrease the size of neural networks, e.g. [1].

Your tasks:

- Explore literature on decreasing the size of NNs
- Report + Presentation

Interested? Contact me!

Tobias Ladner tobias.ladner@tum.de

[1] Elboher, Y. Y., Gottschlich, J., Katz, G. (2020, July). An abstraction-based framework for neural network verification. In International Conference on Computer Aided Verification (pp. 43-65). Springer, Cham.

2/2