

MASTER'S THESIS 2026

Title

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Title

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Acknowledgements

List of Acronyms

NN neural network. 1

Contents

| | |
|-------------------------------------|---|
| List of Acronyms | v |
| 1 Introduction | 1 |
| 1.1 Background | 1 |
| 2 Theory | 2 |
| 2.1 Overview of Batteries | 2 |
| 2.2 Neural Networks | 2 |
| 3 Method | 3 |
| 4 Results and Discussion | 4 |
| A Appendix A: Extra Stuff | 6 |

1

Introduction

1.1 Background

In FIG. 1.1, in TAB. 1.1, in EQ. 1.1 neural networks (NNs).

$$\int_{min}^{max} f(x) dx \quad (1.1)$$

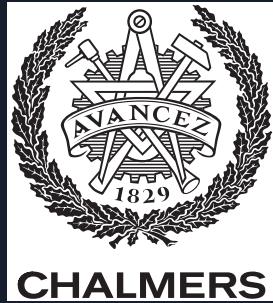


FIG 1.1: Chalmerslogo

TAB 1.1: Comparison of α and s for the different algorithms with the kernel from EQ. 1.1 and the improved kernel in EQ. ???. Again, $\alpha_{obs} = 0.3$ and $s_{obs} = 0.15$.

| Methods | Kernel | α | | | s | | |
|----------------|-------------------------|----------|-------|-------|-------|-------|-------|
| | | Lower | Mean | Upper | Lower | Mean | Upper |
| ABC | K_μ Eq. 1.1 | 0.075 | 0.242 | 0.409 | 0.128 | 0.161 | 0.191 |
| ABC | $K_{\mu\sigma}$ Eq. 1.1 | 0.189 | 0.281 | 0.373 | 0.131 | 0.152 | 0.173 |
| ABC NN | K_μ Eq. 1.1 | 0.197 | 0.271 | 0.343 | 0.143 | 0.151 | 0.158 |
| ABC NN | $K_{\mu\sigma}$ Eq. 1.1 | 0.202 | 0.272 | 0.339 | 0.142 | 0.150 | 0.159 |
| Chain excl. NN | K_μ Eq. 1.1 | 0.207 | 0.211 | 0.215 | 0.163 | 0.164 | 0.165 |
| Chain excl. NN | $K_{\mu\sigma}$ Eq. 1.1 | 0.293 | 0.307 | 0.321 | 0.146 | 0.150 | 0.153 |

[1].

2

Theory

2.1 Overview of Batteries

2.2 Neural Networks

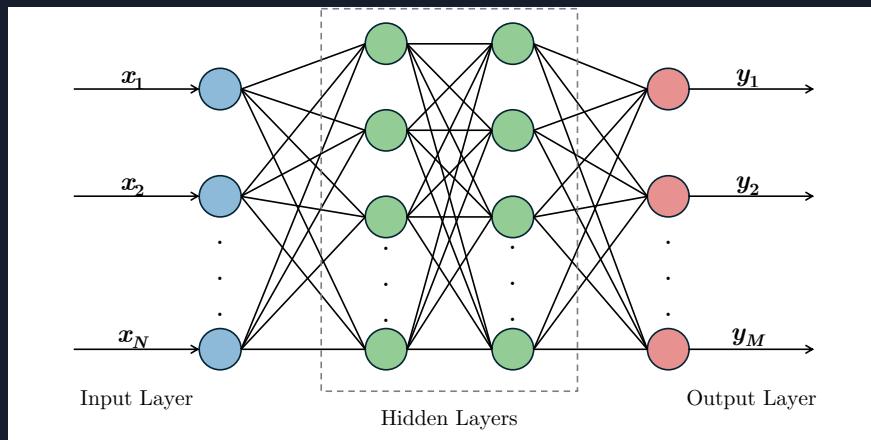


FIG 2.1: Schematic view of a neural network where each circle represents a single neuron. An input signal \mathbf{X} enters the model in the input layer, proceeds through the N hidden layers, and exits from the output layer. This process produces an output \mathbf{Y} , which can be interpreted as a prediction based on the input data.

3

Method

4

Results and Discussion

Bibliography

- [1] J. Haraldsson, “Msc thesis,” *Chalmers*, vol. 1, no. 1, 2026.

A

Appendix A: Extra Stuff



FIG A.1: hej