

MASTER THESIS
COMPUTING SCIENCE



RADBOUD UNIVERSITY

Title Master Thesis

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Abstract

The abstract of your thesis is a brief description of the research hypothesis, scientific context, motivation, and results. The preferred size of an abstract is one paragraph or one page of text.

Contents

1	Introduction	2
2	Preliminaries	3
2.1	Principal Component Analysis	3
2.2	Autoencoder	3
2.3	DeepMDP	3
2.4	Environment: Starcraft II	3
3	Research	4
3.1	Method	4
3.2	Results	4
3.2.1	Research results	4
3.2.2	Discussion	4
4	Related Work	5
5	Conclusions	6
A	Appendix	7

Chapter 1

Introduction

The introduction of your bachelor thesis introduces the research area, the research hypothesis, and the scientific contributions of your work. A good narrative structure is the one suggested by Simon Peyton Jones [?]:

- describe the problem / research question
- motivate why this problem must be solved
- demonstrate that a (new) solution is needed
- explain the intuition behind your solution
- motivate why / how your solution solves the problem (this is technical)
- explain how it compares with related work

Close the introduction with a paragraph in which the content of the next chapters is briefly mentioned (one sentence per chapter).

Chapter 2

Preliminaries

2.1 Reinforcement learning

Jaa en ja

2.2 State-space dimensionality reduction

General info Methods:

2.2.1 Principal Component Analysis

algemene info pca

2.2.2 Autoencoder

Algemene info over ae

2.2.3 DeepMDP

Info over deepmdp

2.3 Environment: Starcraft II

pysc2 info

Chapter 3

Research

Info over doel

3.1 Method

Welke experiments/vergelijkingen gedaan + setup

- Base agent
- PCA agent
- Pretrained AE agent
- Online trained AE agent
- DeepMDP

3.2 Results

sectie opzet

3.2.1 Research results

Resultaten van de verschillende agents

3.2.2 Discussion

Resultaten van AE analyse

Chapter 4

Related Work

In this chapter you demonstrate that you are sufficiently aware of the state-of-art knowledge of the problem domain that you have investigated as well as demonstrating that you have found a *new* solution / approach / method.

Chapter 5

Conclusions

In this chapter you present all conclusions that can be drawn from the preceding chapters. It should not introduce new experiments, theories, investigations, etc.: these should have been written down earlier in the thesis. Therefore, conclusions can be brief and to the point.

Appendix A

Appendix

Appendices are *optional* chapters in which you cover additional material that is required to support your hypothesis, experiments, measurements, conclusions, etc. that would otherwise clutter the presentation of your research.