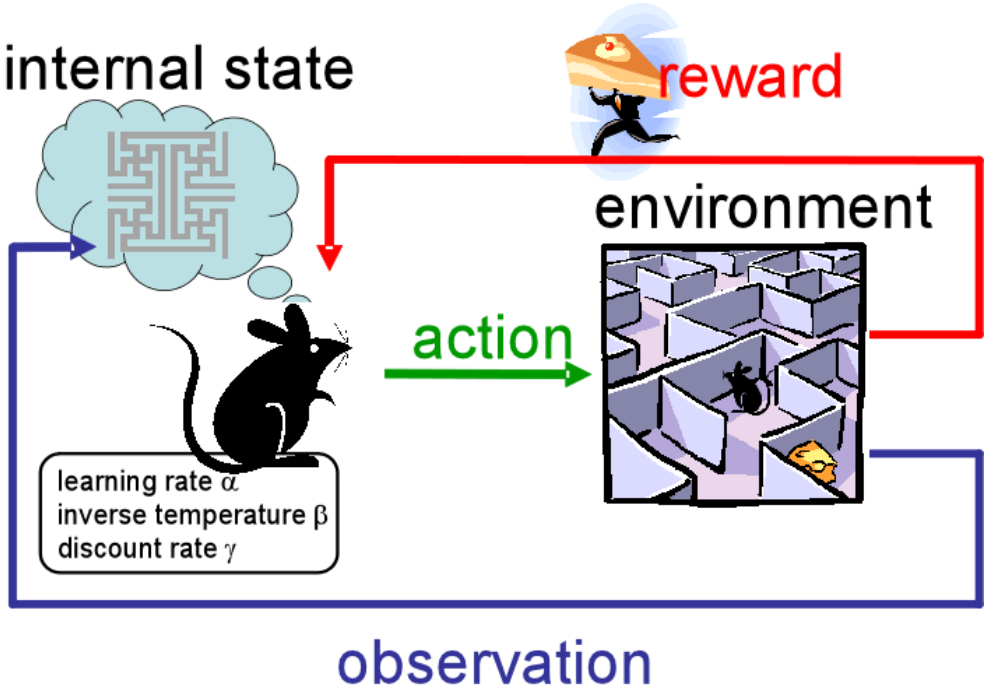
Aarhus University Department of Engineering 2017

Thesis

Title of project



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Project title:

Project Title has to be here

Project:

Master's thesis

Project period:

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Projekt group:

Do we have a number?

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Chapter 1

Introduction

Getting in touch with the most promising and hottest topic in artificial intelligence represents a challenge

To be continued...

Chapter 2

Theoretical Background and State of the Art

2.1 Theoretical Background in Reinforcement Learning

Reinforcement learning is an approach in artificial intelligence for goal-directed learning from interaction, which makes it different from the other approaches in machine learning.

2.2 Previous Research

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2.2.1 Atari 2013

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2.2.2 Go 2016

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2.2.3 A3C 2016

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2.2.4 Framework 2017

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Chapter 3

Project Framework

This project is about learning a car or robot to control and navigate it self. This should be done so the robot don't hit walls or obstacles. To do this a system is created. This system is created as inspiration from [1]
Can be seen on Figure 3.1.

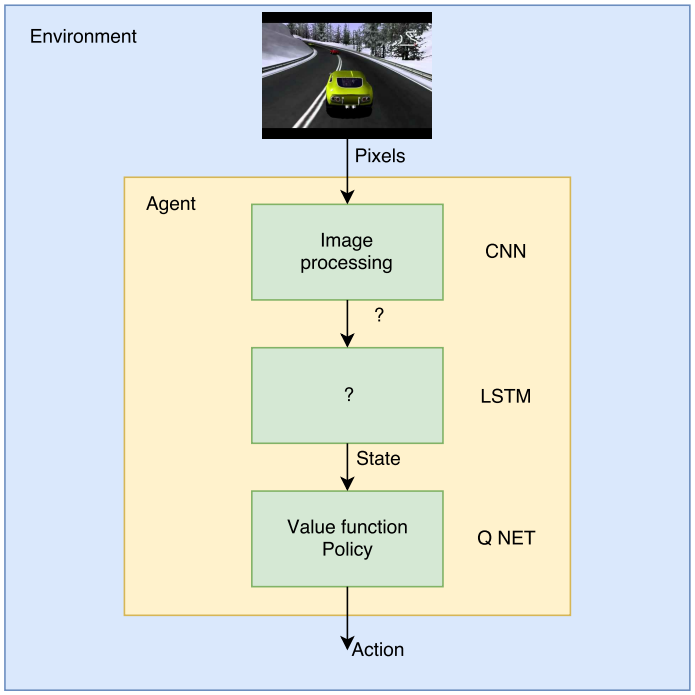

Figure 3.1: *The block diagram of the system*

3.1 Convolution Neural Networks

CNN is here

3.2 Recurrent Neural Networks

...

3.2.1 Long Short Term Memory

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Bibliography

[1] V. Mnih, A. P. Badia, M. Mirza, A. Graves, T. P. Lillicrap, T. Harley, D. Silver, and K. Kavukcuoglu, "Asynchronous methods for deep reinforcement learning," *CoRR*, vol. abs/1602.01783, 2016. [Online]. Available: http://arxiv.org/abs/1602.01783