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#### Chapter 1

# **Project Definition**

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 1.1.

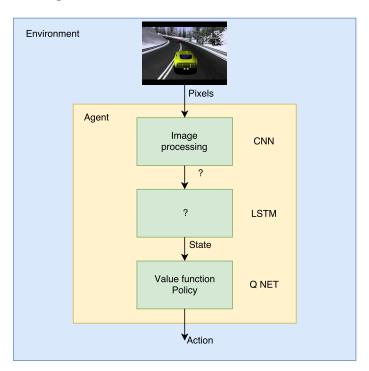


Figure 1.1: The block diagram of the system

### Chapter 2

# Theory

This is theory about everything

#### 2.1 CNN

CNN is here

2.2 Recurrent Neural Networks

...

2.2.1 Long Short Term Memory

...

2.3 Reinforcement Learning

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2.3.1 Value Function

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2.3.2 Policy Gradients

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2.3.3 Actor Critic

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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