

Imperial College of Science, Technology and Medicine  
Department of Computing

# **Learning Disentangled Representations of Complex Scenes with Convolutional Variational Autoencoders**

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## Acknowledgements

I would like to express (whatever feelings I have) to:

- My supervisor
- My second supervisor
- Other researchers
- My family and friends



## Dedication

Dedication here.

‘Quote text here.’

*Guy Quoted*

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# Chapter 1

## Introduction

### 1.1 Motivation and Objectives

A long term goal of artificial intelligence (AI) is the development of artificial general intelligence (AGI). A number of theoretical frameworks have been presented as formalizations of what it means to achieve AGI, notably by Hutter [1].

Reinforcement learning is fundamental in this framework. Recent advances in deep reinforcement learning systems have mastered a wide range of tasks, including Atari 2600 games and Go [2].

### 1.2 Contributions

Contributions here.

# Chapter 2

## Background Theory

### 2.1 Introduction

Text of the Background.

# Chapter 3

## Conclusion

### 3.1 Summary of Thesis Achievements

Summary.

### 3.2 Applications

Applications.

### 3.3 Future Work

Future Work.

# Bibliography

- [1] M. Hutter. *Universal Artificial Intelligence*, volume 1. 2005.
- [2] V. Mnih, K. Kavukcuoglu, D. Silver, A. A. Rusu, J. Veness, M. G. Bellemare, A. Graves, M. Riedmiller, A. K. Fidjeland, G. Ostrovski, S. Petersen, C. Beattie, A. Sadik, I. Antonoglou, H. King, D. Kumaran, D. Wierstra, S. Legg, and D. Hassabis. Human-level control through deep reinforcement learning. *Nature*, 518(7540):529–533, 2015.