Learning

Subtitle

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Abstract

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Introduction

1.1 Background and Motivation

Something about cancer and current treatments

1.2 Goal / Problem

What we want to achieve

1.3 Scope and Limitations

1.4 Research Method

1.5 Related work

Chapter 2

Background

2.1 Cancer

2.1.1 regular colonoscopy/ Gastroscopy

2.1.2 Pillcam

2.2 Machine Learning

Testing a cite:

A computer program is said to learn from experience E with respect to some class of tasks T and performance measure P, if its performance at tasks in T, as measured by P, improves with the experience E. Mitchell 1997

2.2.1 Tasks (other better word goes here)

- Classification
- regression
- transcription/translation
- de-noising /finding missing inputs

2.2.2 The rate of success

What is a good result, how to measure?
FP,TN,FN,TP

2.3 supervised vs unsupervised

What it means to be S/US.
Something about the kind of experience allowed during the learning process.

2.4 Unsupervised

noe med å dele i grupper? Experience the dataset containing many features, and finds useful properties of the structures. ***Unsupervised learning algorithms*** *experience a dataset containing manyfeatures, then learn useful properties of the structure of this dataset. In the contextof deep learning, we usually want to learn the entire probability distribution thatgenerated a dataset, whether explicitly, as in density estimation, or implicitly, fortasks like synthesis or denoising. Some other unsupervised learning algorithmsperform other roles, like clustering, which consists of dividing the dataset intoclusters of similar examples.* Goodfellow, Bengio, and Courville 2016

2.4.1 Approaches to unsupervised learning

look at the subsection 2.2.1 to see what applies to the unsupervised.

2.4.2 Deep Unsupervised learning

2.4.3 more

Part II

The project

Chapter 3

Planning the project

Part III

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Chapter 4

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Bibliography

Goodfellow, Ian, Yoshua Bengio, and Aaron Courville (2016). *Deep Learning*. http://www.deeplearningbook.org. MIT Press.

Mitchell, Tom M (1997). *Machine learning*. eng. New York.