

Introduction

The aim of the project. clarify this iwth abbas

Background

History of machine learning and progresses

Neural networks

City some semnificant results and their decay Quote Hinton in the reasons that neural nets were abandoned (lack of CPU, too much backprop, not enough labeled data)

Why deep nets did not work before. Talk about how with the pre trained nets you have the guarantte to get better results than you got beore

Backpropagation here?

Hopfield networks

Add nice pics.

Do not talk much about them

Boltzmann machines

Stochastic hopfield nets Talk about the issues with their training algorithms

Restricted Boltzmann machines

Idea. Why they are easier to train and understand than

Pre training

Using unsupervised learning for supervised learning This is important and sketch the importance of learned features

Mention auto encoders and deep auto encoders vs PCA

Deep belief networks

use of backpropagation. stacking multiple RBMs ### Softmax units