

OdarTec CNN help

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About OdarTec CNN

OdarTec CNN is a program that lets you try and understand Convolutional Neural Networks. It provides you with several options letting you build different

CNN's or train a CNN with different parameters.

Introduction

This document guides you through the complex theme of CNN (convolutional neural network). For a quick reference about CNN's a special glossary is included at the end of this document.

Quick overview

Main body text goes here.

Setting CNN options

The CNN-options can be set in several tab pages using the Setup CNN dialog. The settings are splitted among 3 tab pages where tab page 1 contains parameter to set the network topology. Tab page 2 contains the parameter for training and tab page 3 let set you some additional parameter.

Setting up the CNN-Topology

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Setting up the CNN-Training parameter

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Extensible Markup Language

CNN Glossary

Momentum The weight delta of i-1 multiplied by a value.

See also .

Momentum Nesterov The weight delta of i-1 multiplied by a value.

See also .

Mini-Batch Gradient Descent A method for updating weight parameter in a CNN. Using MBGD the weights get updated after learning a mini-batch (a subset of the whole training data). This leads to a relative fast convergence which is much more stable than using SGD.

See also .

Stochastic Gradient Descent A method for updating weight parameter in a CNN. Using SGD the weights get updated after every learned map. The net converges faster using SGD than using Batch learning but slower and more unstable than using Mini-Batch learning.

See also .