Machine Learning Engineer Nanodegree

Capstone Proposal

Benjamin Rouillé d'Orfeuil

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Domain Background

Convolutional Neural Networks (CNNs) have successfully been applied in the field of image recognition. This class of models has proven to be incredibly efficient at classifying images and often outperforms other machine learning algorithms for this task. To illustrate, highly accurate predictions can be achieved on datasets like the MNIST database of handwritten digits[1] and the CIFAR-10 dataset[2] using a simple CNN architecture.

Problem Statement

Datasets and Inputs

Solution Statement

Benchmark Model

Evaluation Metrics

Project Design

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[1]The MNIST database is available at `http://yann.lecun.com/exdb/mnist/`. A quick analysis of this dataset can be found here.

[2]The CIFAR-10 dataset can be found at the following url: `https://www.cs.toronto.edu/~kriz/cifar.html`. Predictions on this dataset is presented here.