

# **Machine Learning Project**

## Training Convolutional Neural Networks for Computer Vision using CAD models

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### **Abstract**

In 2012 a convolutional neural network (CNN)[] was the winner of the ImageNet image classification challenge, by a considerable margin. Deep Learning has since then revolutionised computer vision. CNN's have been a popular research topic and have been successfully used to solve challenges not only in computer vision but also in other topics such as natural language processing. The goal of this project is to cover the fundamentals of deep learning and explore how to generate synthetic data to train CNN's and solve some image classification challenges that will be discussed in the following section.

## **1**

## **References**