# COMPUTER VISION

# PROJECT 2

# Report

## NETWORK ARCHITECTURE

The network is made of Max Pooling layer of size (4,4) followed by a 2D Convolutional layer consisting of 8 filters of the size 3 x 3 stride 1. This is followed by another 2D Convolutional layer consisting of 32 filters of size 3 x 3 and stride 1. This is followed by another 2D Convolutional layer consisting of 64 filters size 3 x 3 and stride 2. All the convolutional layers have a ReLU activation , a 'he_normal' kernel initializer and l1 kernel regularizer. The last convolutional layer is followed by a dropout layer with a dropout rate of 0.5 , an average pooling layer of pool size 2 , a flatten layer, a dense layer consisting of 512 units and another dense layer consisting of 10 units. The last dense layer uses the softmax activation and the dense layer before it use the ReLU activation. The model is trained for 200 epochs with a batch size of 512.

## RESULTS

I obtained a maximum accuracy of **0.9025** on the testing data by training on the data given with the project. The entire program took **3 minutes and 28 seconds** to run on my computer.