

# SELF DRIVING CAR NANODEGREE

## Project 3 : Behavior Cloning

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### Step 1 :Collecting Data.

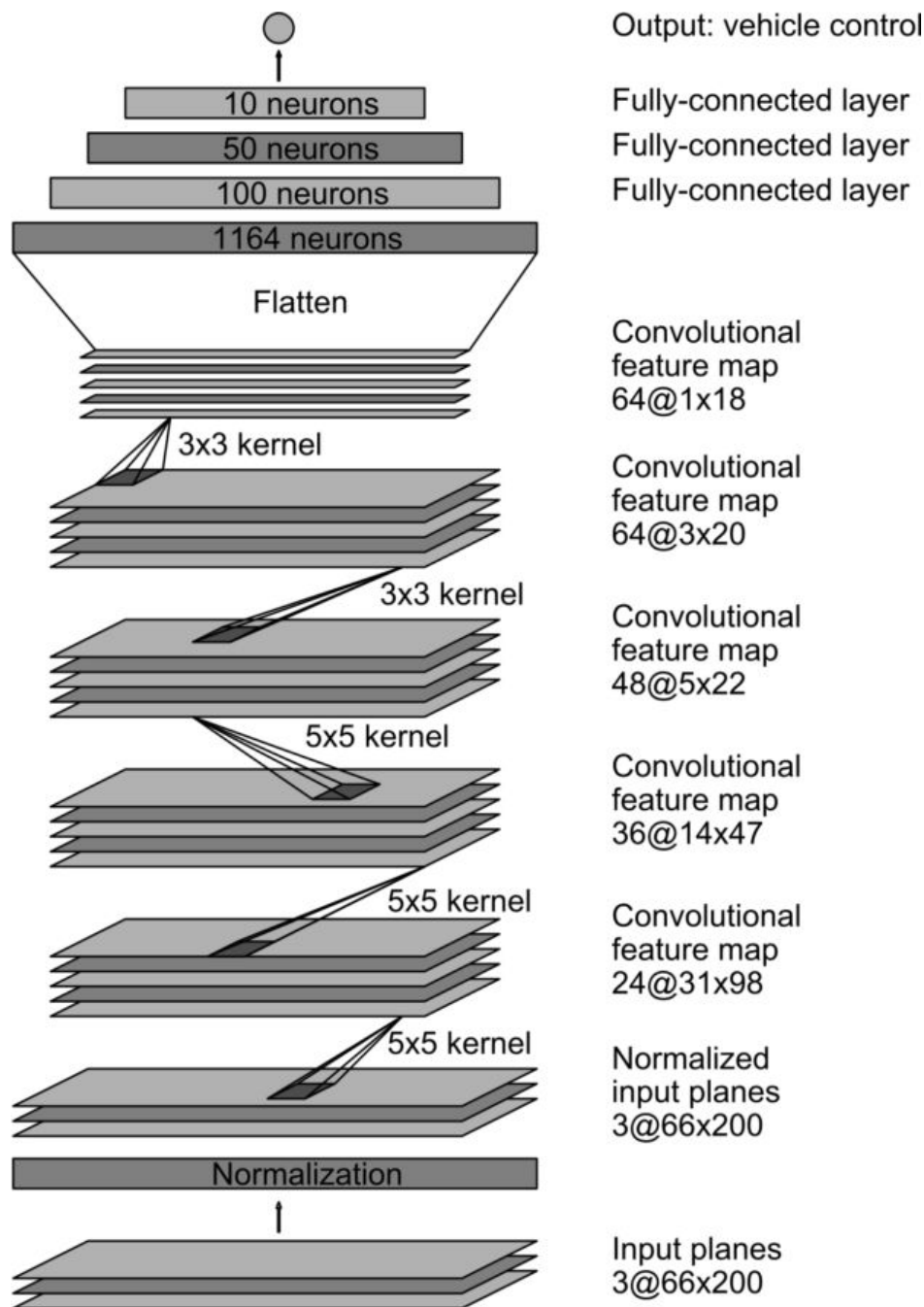
With the help of simulator I drove around 7-8 Laps and the 3 Cameras attached recorded the data as images from their respective angles.

### Step2 : Building the model.

I have used Keras as my framework with Tensorflow as its backend.

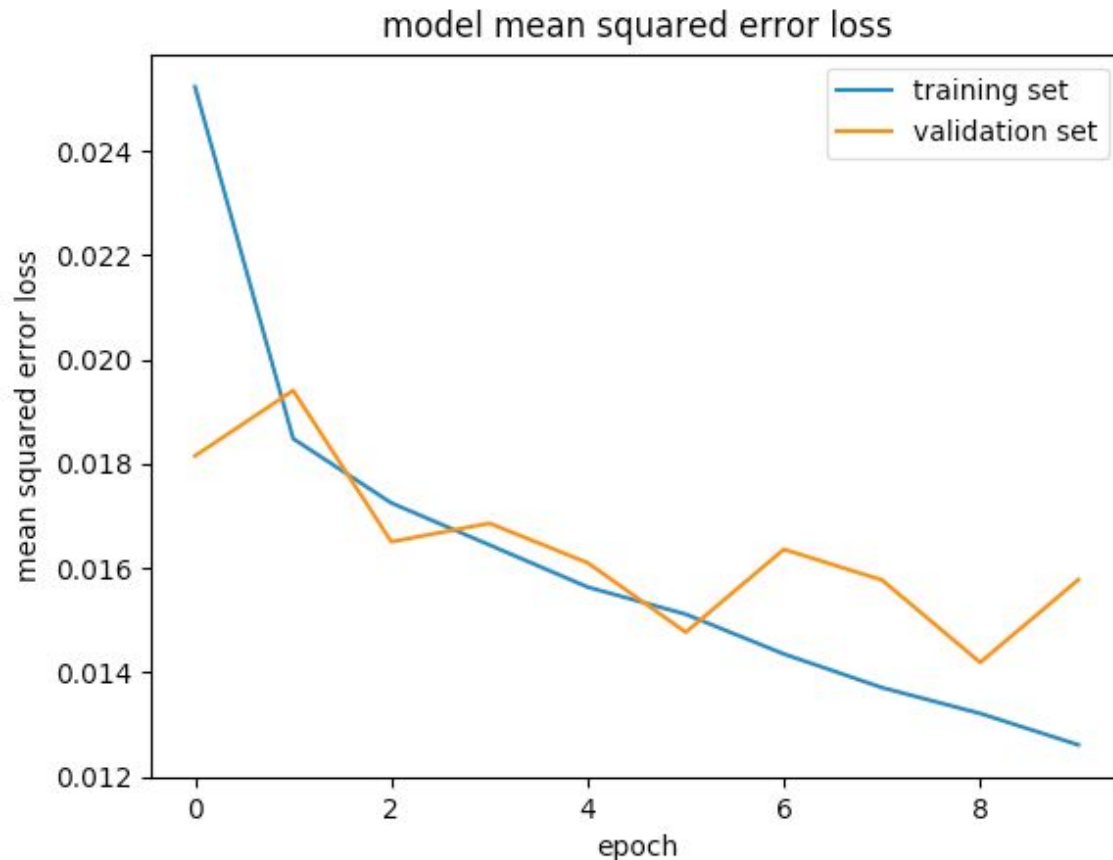
Before building the Model I need to feed my data in my Neural Network and thus have used `load_dataset()` for the Purpose.

Below Shows the NVIDIA architecture



I have implemented the Same Architecture but have added dropout after the 5th convolution to reduce overfitting and then allowed it to go to fully Connected Layers.

For minimizing error I have used Adam Optimizer because no need to change Learning Rate manually.



As The number of Epoch Increasing the loss started varying highly.