

# Practical Aspects of Data Science

## Project 1

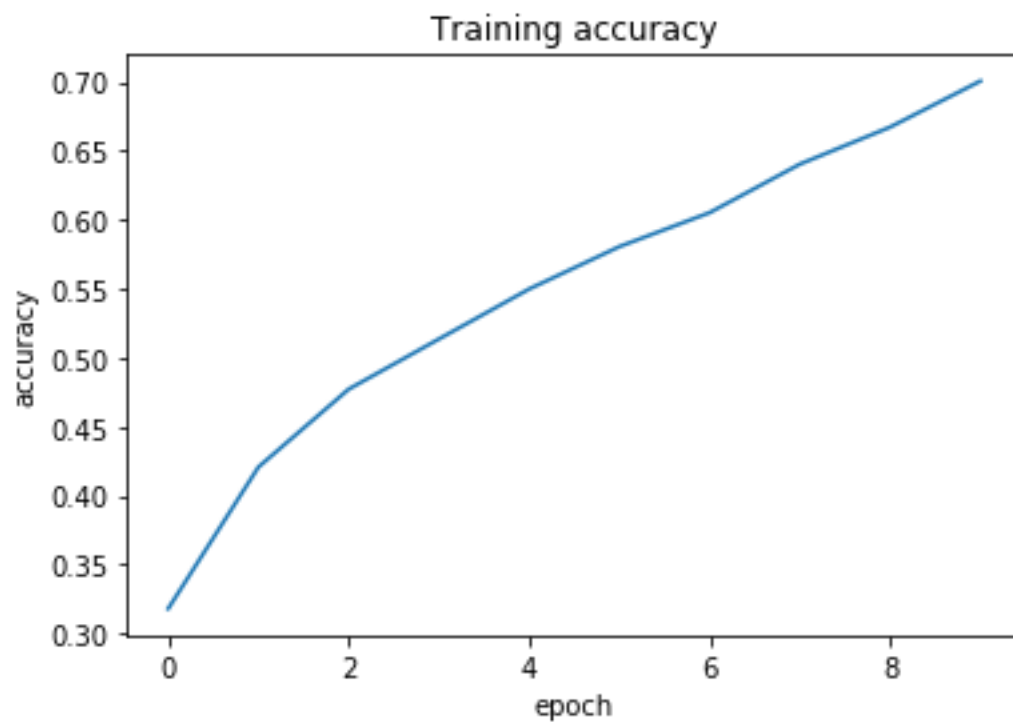
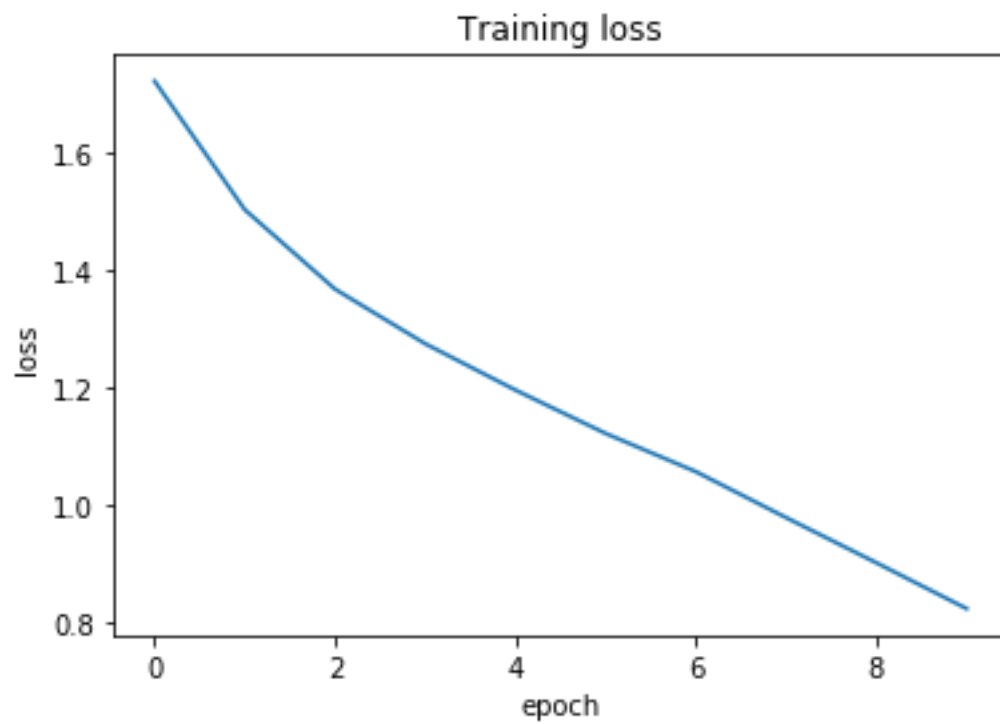
### Team Members:

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3. Dawson Nazareth - DVN170002

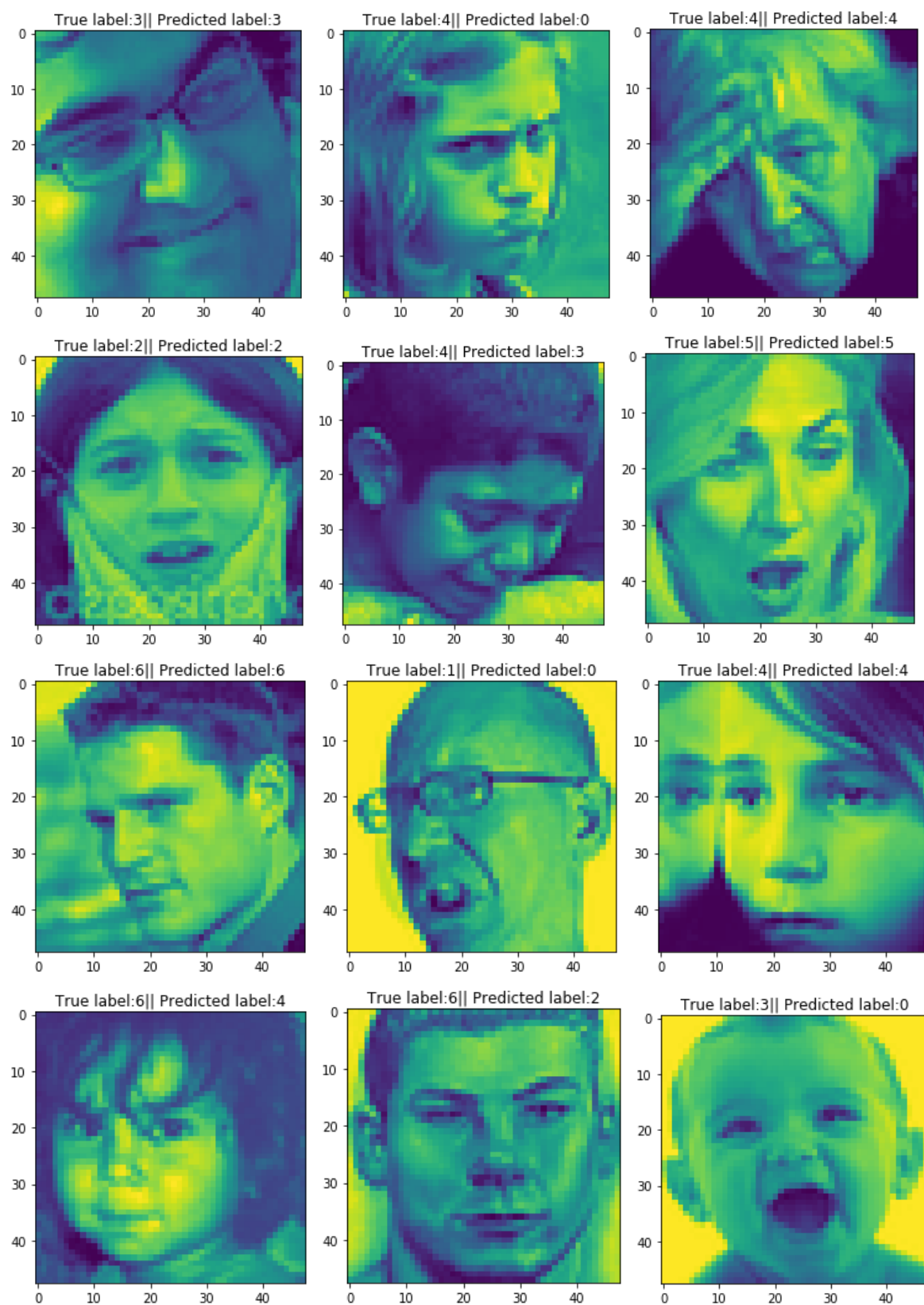
### Topic:

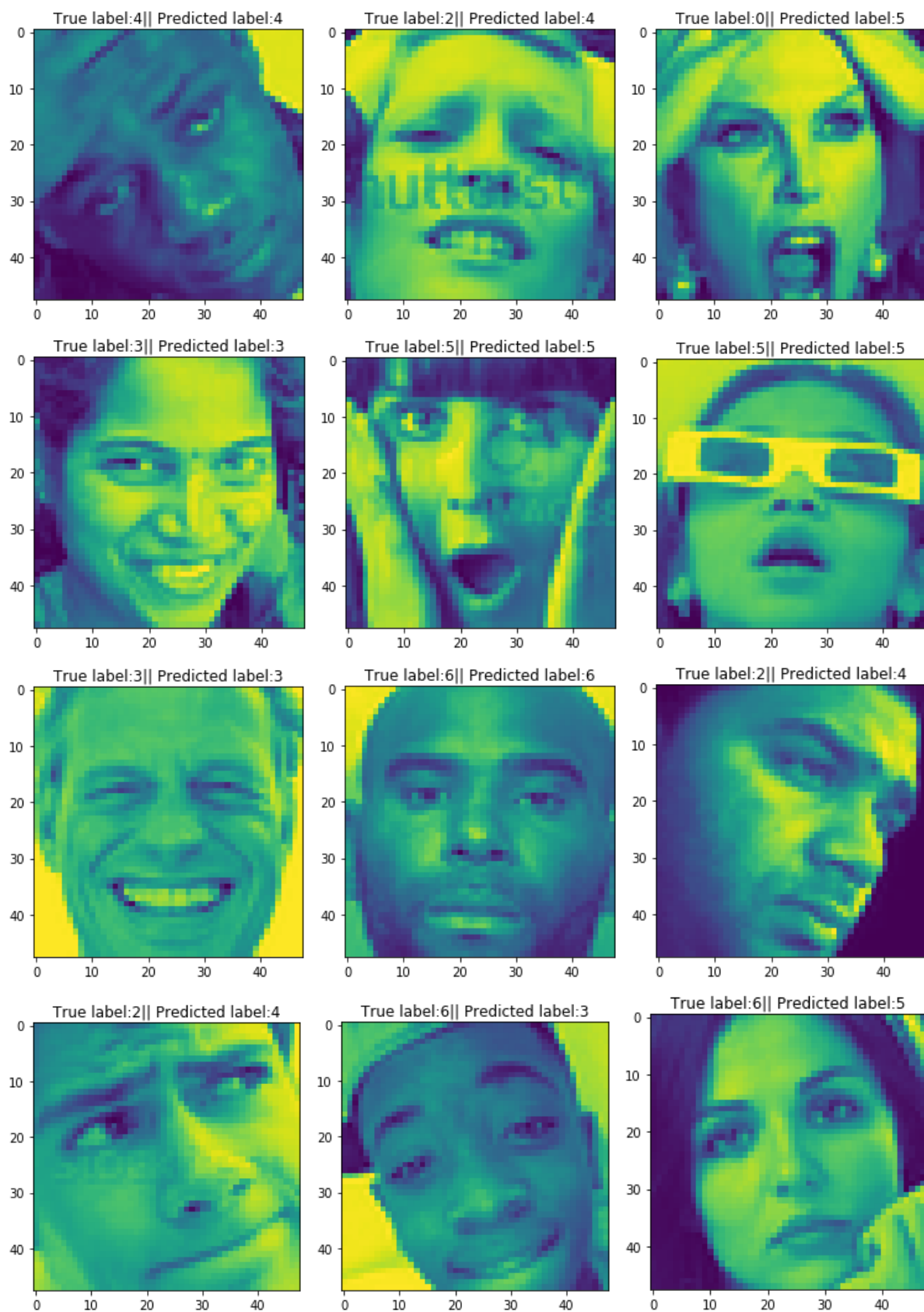
Challenges in Representation Learning: Facial Expression Recognition Challenge

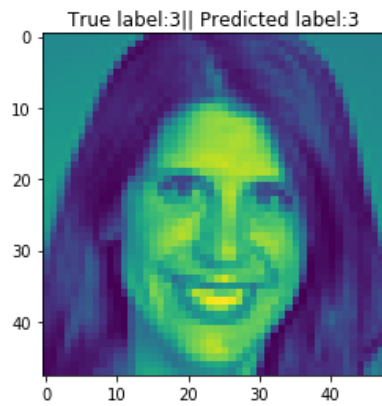
History plots for training loss and accuracy as a function of number of iterations (epochs):



## Program prediction examples:







### Parameter Tuning:

Iterations	Parameters	Training and test accuracy
1	No. of layers = 2 Kernel size layer = (3,3) Activation function = relu, softmax (output)  Epochs = 10 Learning rate = 0.0001	Train = 40% Test = 33%
2	No. of layers = 5 Kernel size layer = (3,3) Activation function = relu, softmax (output)  Epochs = 20 Learning rate = 0.001	Train = 45% Test = 44%
3	No. of layers = 7 Kernel size layer = (3,3) Activation function = relu, softmax (output)  Epochs = 10 Learning rate = 0.01	Train = 70% Test = 54.6%