

AI & Pattern Recognition Classwork 04 AlexNet

ID : _____ Name : _____

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1. Complete the tasks within a class implementation

Create a downsized AlexNet model for classifying Fashion MNIST. The sequential architecture consists of Conv 11x11x20/1, MaxPool 2x2/2, Conv 5x5x40/1, MaxPool 2x2/2, Conv 3x3x80/1, and Conv 3x3x80/1, MaxPool 2x2/2, Dense 50, Dense 50, and Dense 10 layers. All convolutional layers use the same padding. Provide the code and architectural overview of the model. Train the network using RMSProp optimization (select the epoch number). Calculate the accuracy on the training set, validation set, and test set.

(Note: 11x11x24/1 indicates an 11x11 filter, 24 feature maps, and a stride of 1.)