

Introduction to dropouts



**Overfitting means model performs well while training
but fails in case of unknown real world samples**









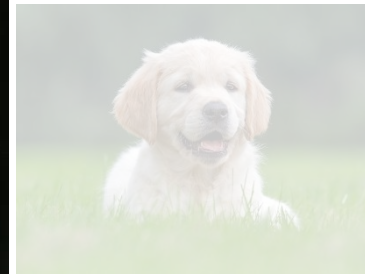
Training Phase





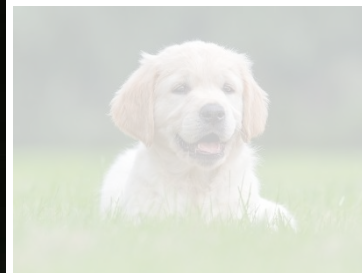
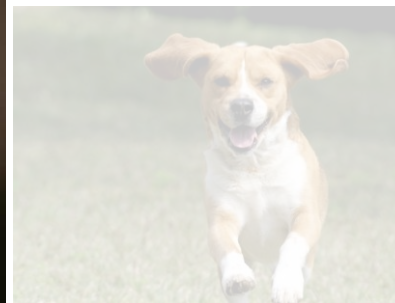
Prediction Phase





Prediction Phase





Prediction Phase



Preventing Overfitting

Early stopping

Regularisation

Data Augmentation

Dropout



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Dropout

A percentage of neurons will stay off in each training step

Neurons to be dropped out is chosen at random

Dropout creates different computation graph in each step



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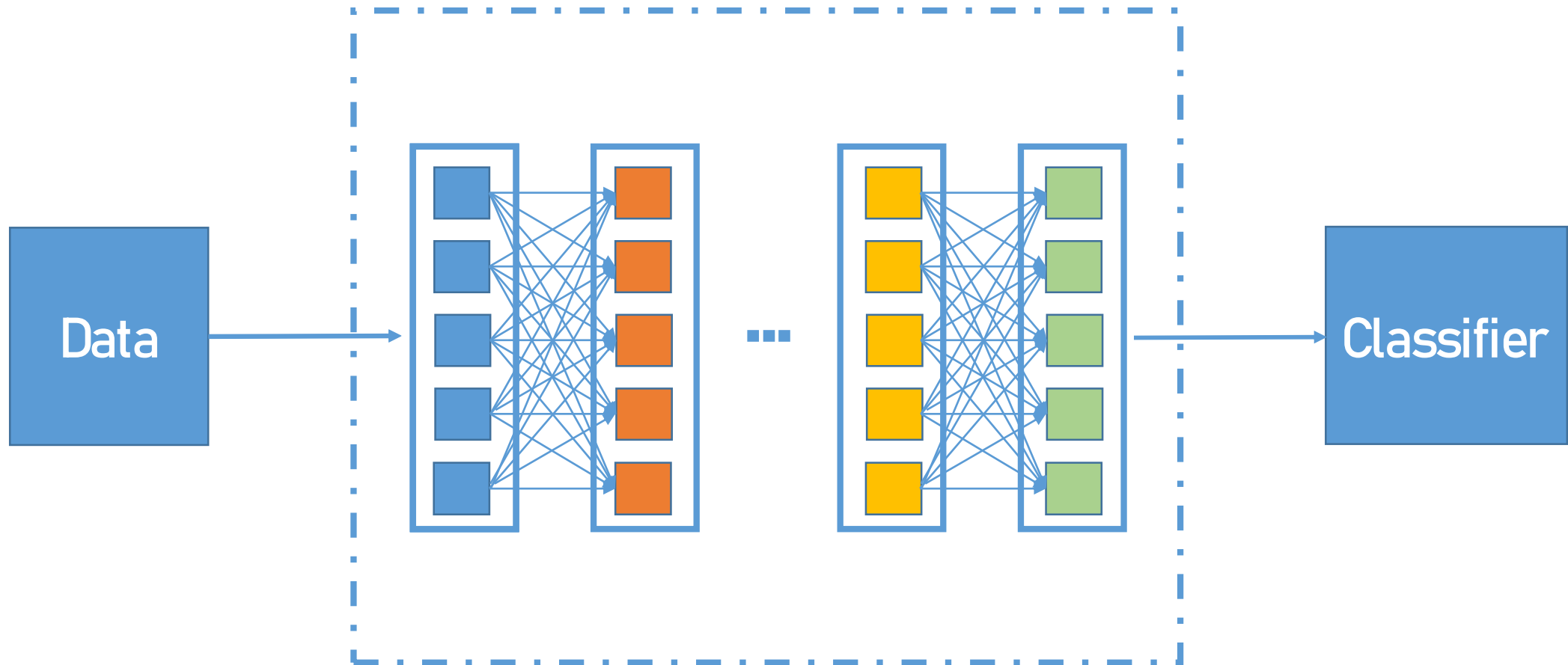
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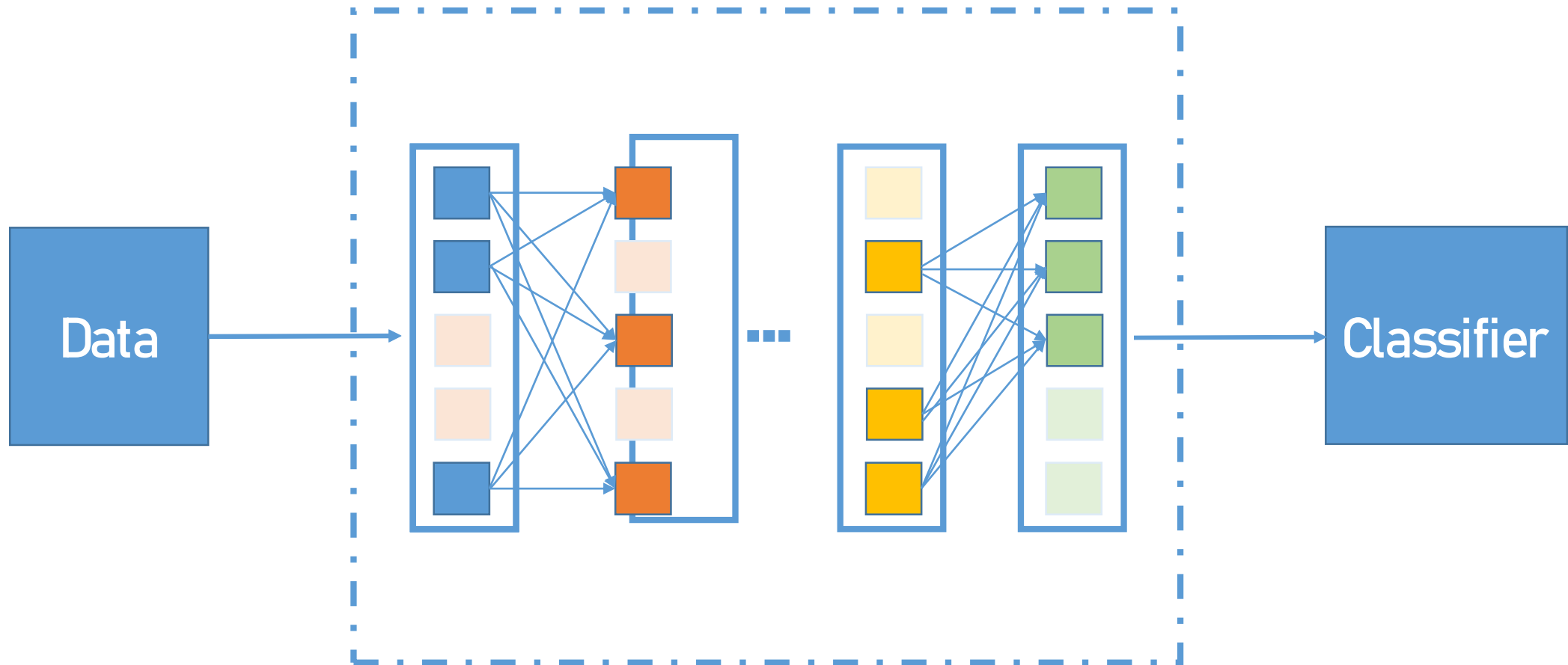
Neural Networks Architecture



Densely connected network



Neural Networks Architecture



Introducing dropout = 40%

