

# Formulas

## Definitions

$X$  represents the matrix of input samples

## Forward Propagation

### Layers

#### Dense

Placeholder

#### Dropout

Placeholder

#### Recurrent

Placeholder

#### Convolutional

Placeholder

### Activation

#### Linear

Placeholder

#### Sigmoid

Placeholder

#### Rectified Linear Unit

Placeholder

#### Softmax

Placeholder

### Loss

#### Mean Absolute Error

Placeholder

#### Mean Squared Error

Placeholder

## **Binary Cross-Entropy**

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## **Categorical Cross-Entropy**

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