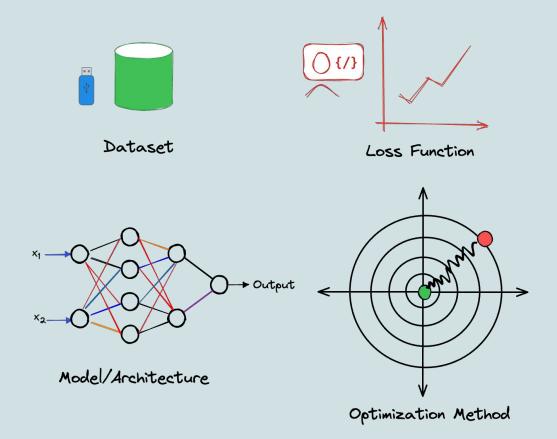
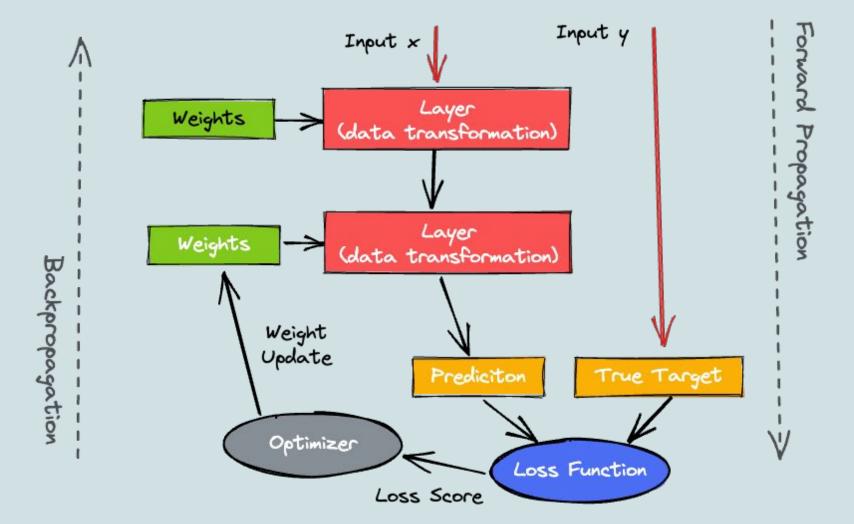


A Brief Review

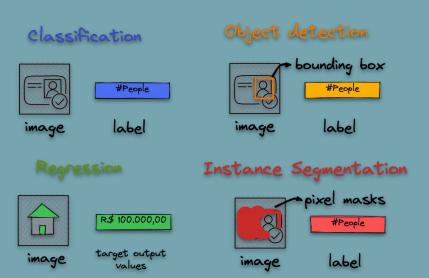
The four key ingredients when training any neural network





Ingredient #01 Dataset





Ingredient #02 Loss Function

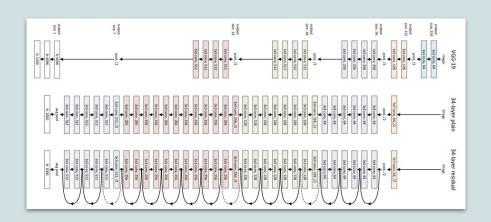
Regression

Mean Square Error (MSE) Mean Absolute Error (MAE) Mean Percentage Error (MPE) Classification

Binary Cross-Entropy Categorical Cross-Entropy Object Detection

Cross-Entropy +
Regression Loss

Ingredient #03 Model Architecture



Classification

Object Detection

Instance Segm.

VGG

ResNet

MobileNet

MobileNet + YOLO

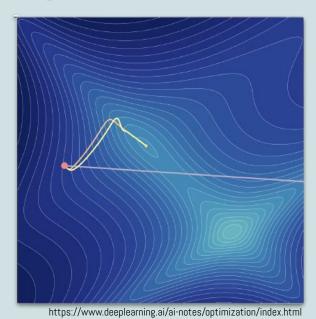
Resnet + SSD

VGG + R-CNN

U-Net

Mask R-CNN

Ingredient #04 Optimization



SGD (and its variants) Adam Nadam Rectified Adam (RAdam) **RMSprop** Adadelta Adagrad