

Machine Learning Project Life Cycle

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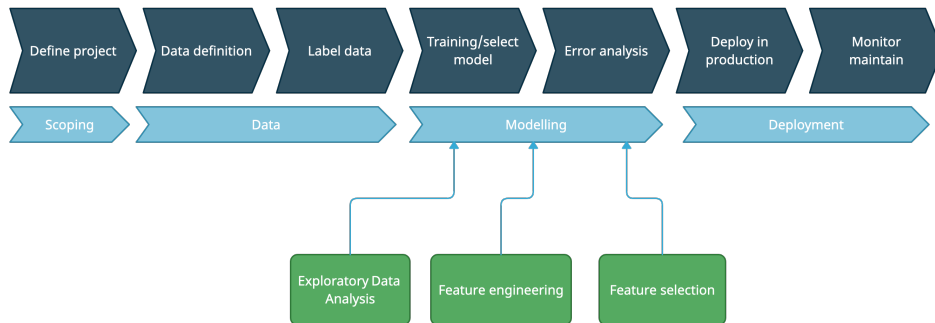
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Overview

- 1 Machine learning/data science project life cycle
- 2 Machine learning paradigm
- 3 Introduction to neural networks with Tensorflow/keras
- 4 Example projects with Tensorflow/Keras

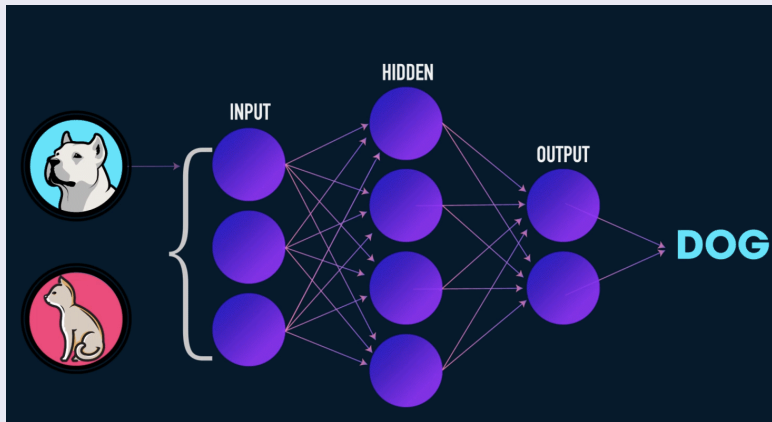
Machine learning/data science project life cycle

Machine learning pipeline



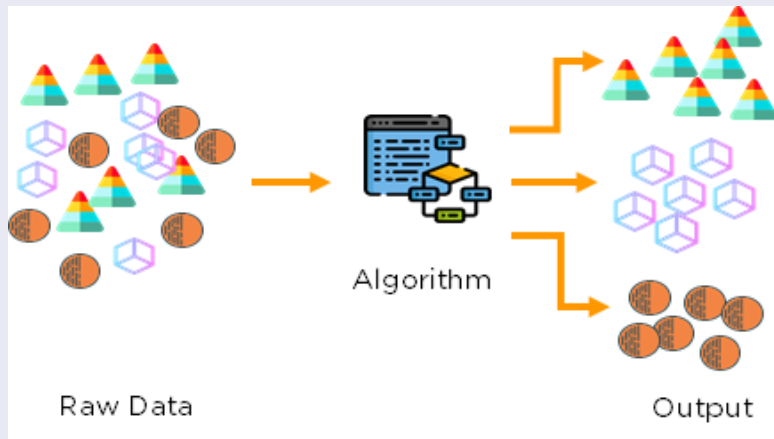
Machine learning paradigms

Supervised learning

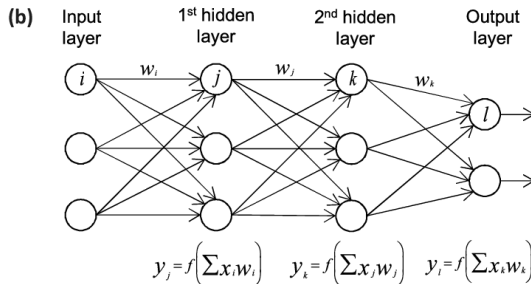
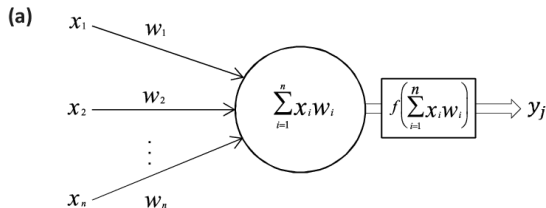


Machine learning paradigms

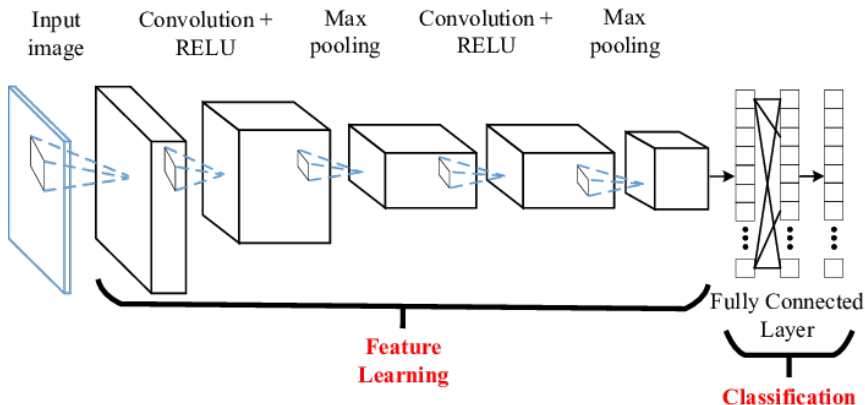
Unsupervised learning



Introduction to Multi Layer Perceptron (MLP) with Tensorflow/Keras



Introduction to Convolutional Neural Network (CNN) with Tensorflow/Keras



Project 1: Classification

Example

- 1 Build the model architecture
- 2 Select the loss function
- 3 Select your learning algorithm
- 4 Iteratively train the model

Project 2: Classification and regression

Example

- 1 Build the model architecture
- 2 Select the loss function
- 3 Select your learning algorithm
- 4 Iteratively train the model

Project 3: Image segmentation

Example

- 1 Build the model architecture
- 2 Select the loss function
- 3 Select your learning algorithm
- 4 Iteratively train the model