

# Machine Learning Project Life Cycle

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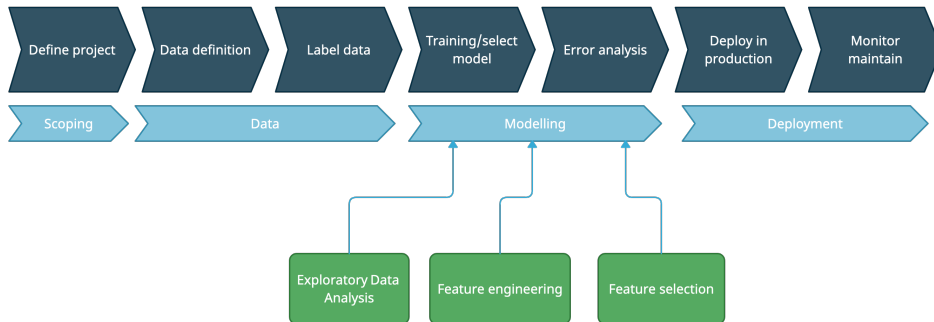
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# Overview

- 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

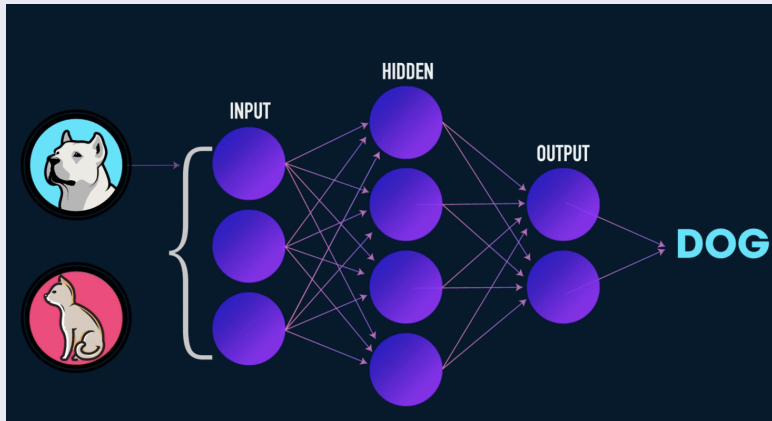
# Machine learning/data science project life cycle

## Machine learning pipeline



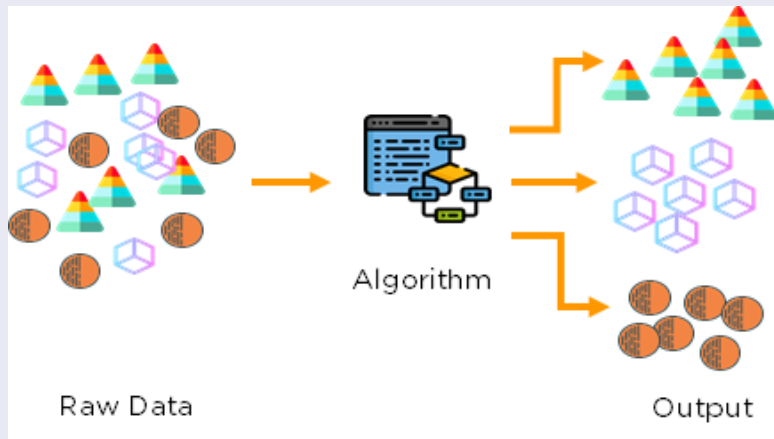
# Machine learning paradigms

## Supervised learning

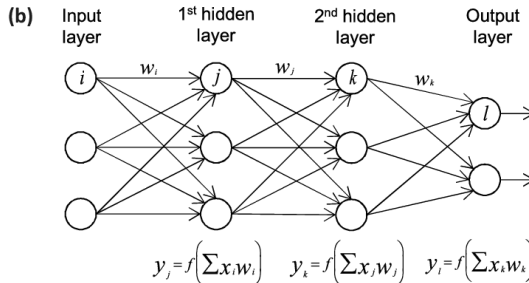
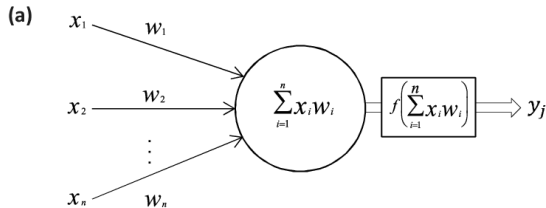


# Machine learning paradigms

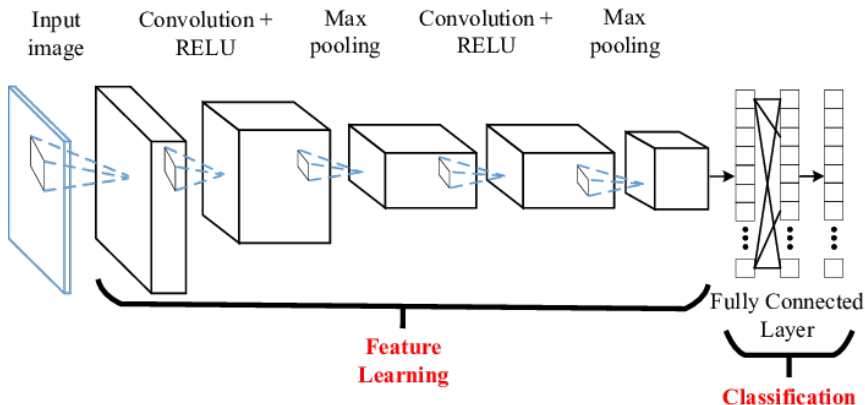
## Unsupervised learning



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



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



# Project 1: Predict heating and cooling load

## Example

- 1 Build the model architecture
- 2 Select the loss function
- 3 Select your learning algorithm
- 4 Iteratively train the model
- 5 Deploy model to production
- 6 Use model in production



# Project 2: classify fashion clothing

## Example

- 1 Build the model architecture
- 2 Select the loss function
- 3 Select your learning algorithm
- 4 Iteratively train the model
- 5 Deploy model to production
- 6 Use model in production