

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is a light green color. They are positioned diagonally, with the blue one in front of the green one.

Machine Learning life cycle

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Supervised Learning

What?

Classification

When?

Survival

How Much?

Regression

How much at certain time ?

Time series

How much at certain time and place ?

Panel

Where?

Geospatial

When at certain place?

Longitudinal



Unsupervised Learning

Clustering

Decomposition

Association Rule, labelling each other

Anomaly Detection



Define Project Objectives

Specify business problem

Acquire Subject Matter Expertise

Define Unite Analysis

Define Prediction Target

Prioritize modelling criteria

Consider Risk and Success Criteria

Decide whether to Continue



Acquire & Explore Data

Find Appropriate Data

Merge data into single table

Conduct question exploratory data analysis

Find and remove target leakage

Feature Engineering



Model Data

Variable Selection

Build Candidate Model

COmmunicate Model Insight



Interpret & Communicate

Interpret model

Communicate model Insight



Implement & Document and Maintain

Set up batch or API prediction system

Document modelling for reproducibility

Create model monitoring and maintenance plan



Question before start

1. Problem Statement ?
2. Action ?
3. Personalization and Specification ?
4. How to communicate to executor?