

Case Study - Titanic

Dr. Nassim Sohaee

Main Steps:

1. Look at the big picture.
2. Get the data.
3. Discover and visualize the data to gain insights.
4. Prepare the data for Machine Learning algorithms.
5. Select a model and train it.
6. Fine-tune your model.
7. Present your solution.

1 - Look at the big picture

- Frame the Problem
- Pipelines
- Select a Performance Measure
- Check the Assumptions

2 - Get the Data

- Create the Workspace
- Download the Data
- Take a Quick Look at the Data Structure
- Data leakage

3 - Prepare the Data for Machine Learning Algorithms

- Data Cleaning
- Handling Text and Categorical Attributes
- Split data in train and test datasets
- Feature Scaling

4 - Select and Train a Model

- Training and Evaluating on the Training Set
- Better Evaluation Using Cross-Validation

5 - Fine-Tune Your Model

- Grid Search
- Ensemble Methods
- Evaluate Your System on the Test Set

7- Present your solution.

- report