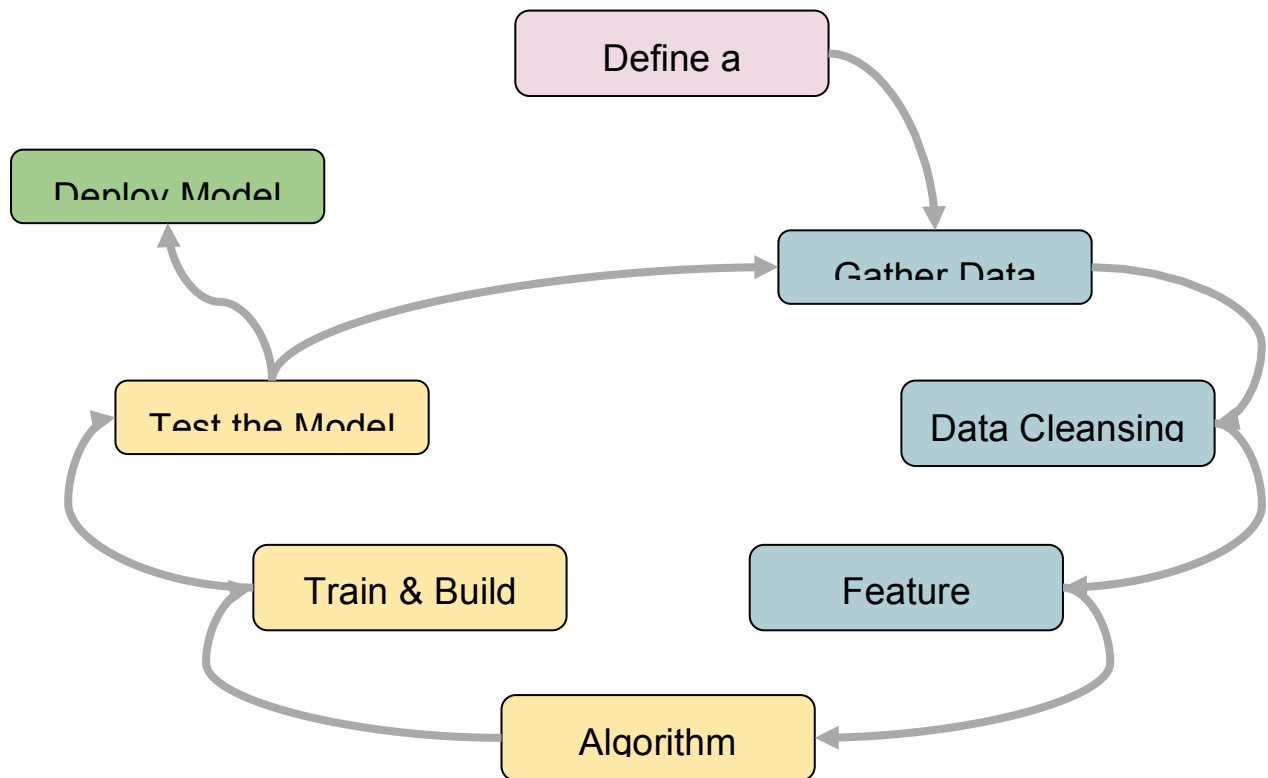


# Machine Learning Life Cycle



## 1. Define a Problem

- Classification
- Regression
- Clustering
- Recommendation

Example: Predict whether a e-commerce user buys a product or not

## 2. Gather Data

- Databases
- File Storage
- Web

## 3. Data Cleansing & Preparation

- Erroneous data
- Missing Value Treatment

Tools used:

- pandas
- numpy

- Jupyter Notebooks or plain Python scripts

## 4. Feature Engineering

Converting raw data into **ml-algorithm consumable format**

## 5. Algorithm Selection

Chose the algorithm based on,

- problem
- data type and size
- computation capacity

## 6. Train & Build Model

Feed the training data into the algorithm, you will get a model!

## 7. Test the Model

Evaluate how accurate your model is. Different ways to measure the accuracy of different types of problems.

## 8. Deploy Model

If satisfied with the results, go ahead and start using your model on real-world data.