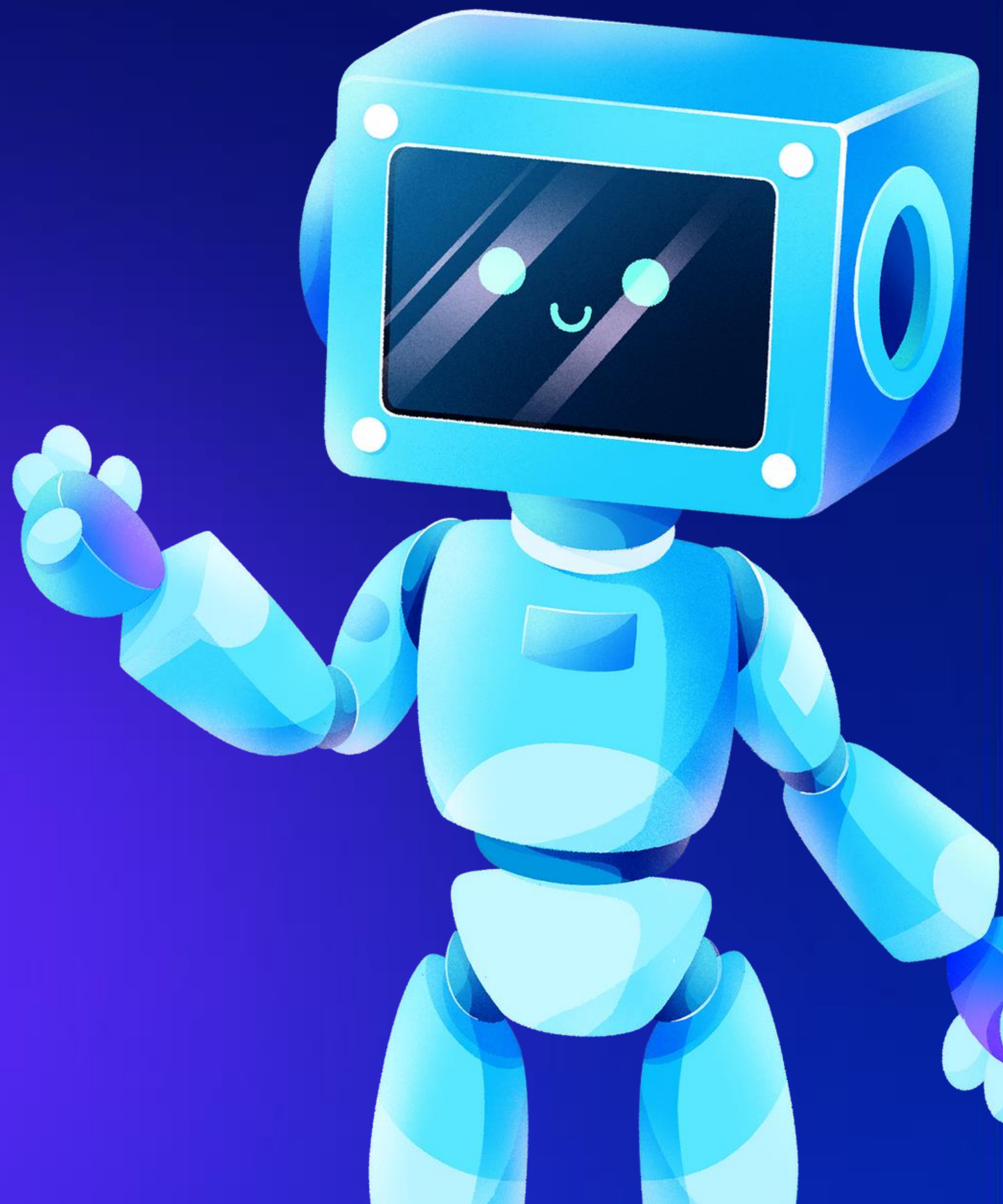




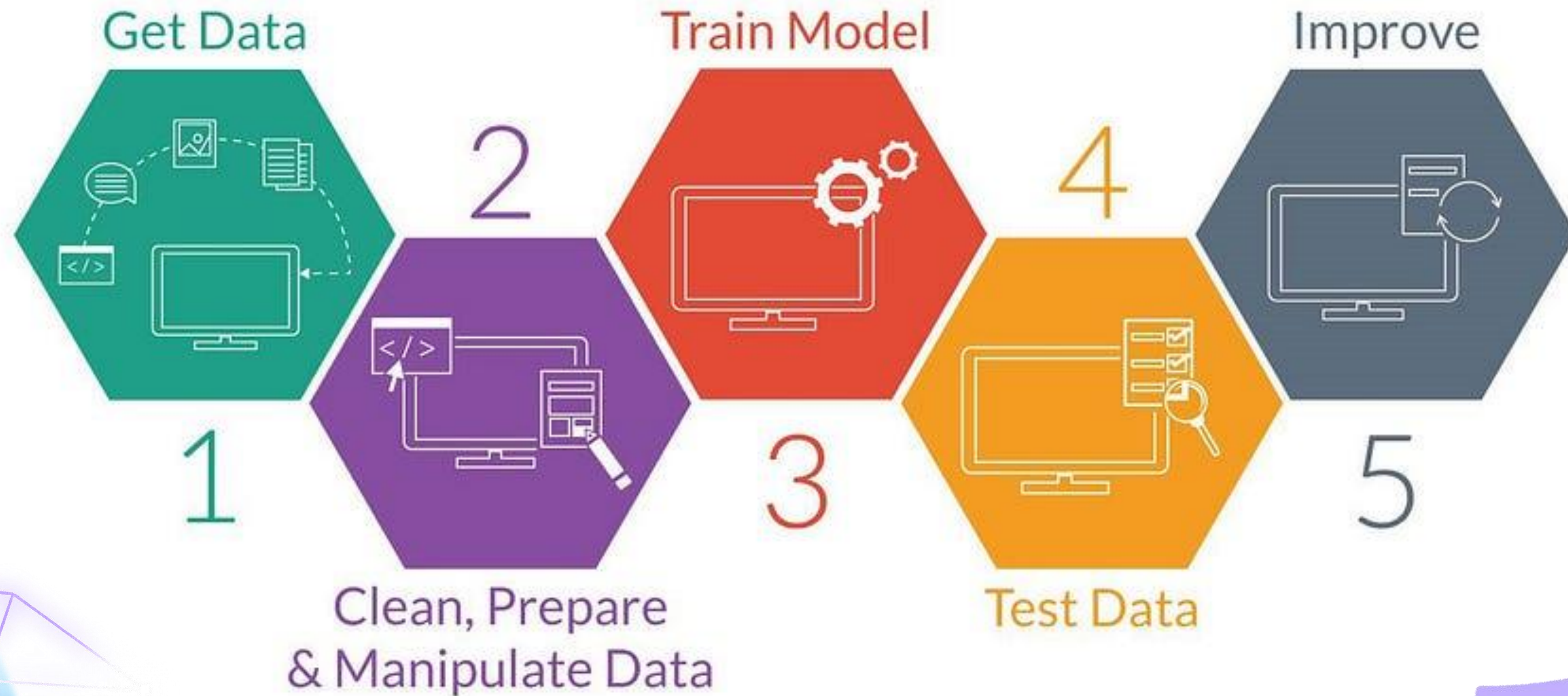
MACHINE LEARNING

Decision tree algorithm

By Kittithat Kongtaworn (P'Junior)

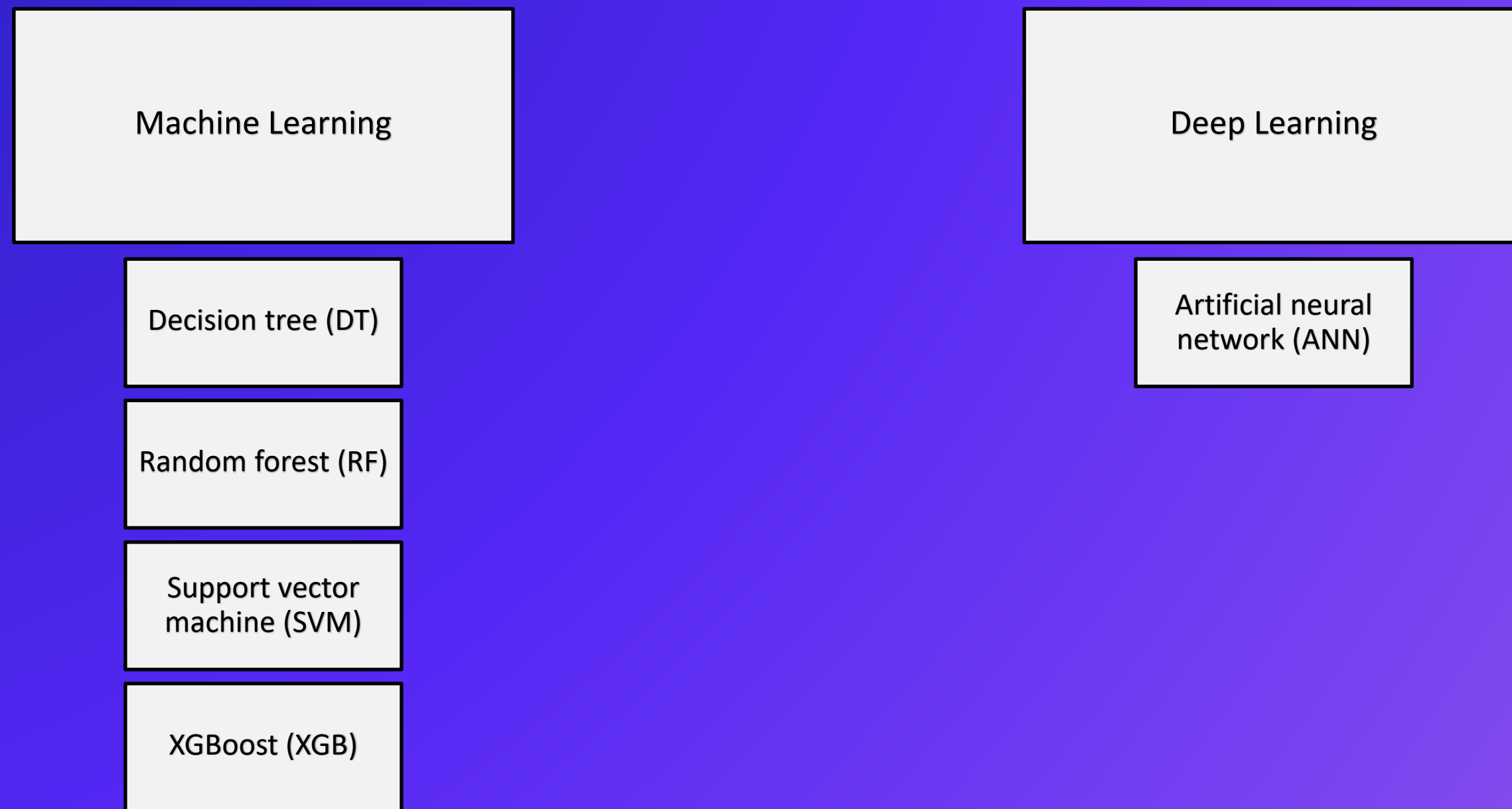


ML Workflow

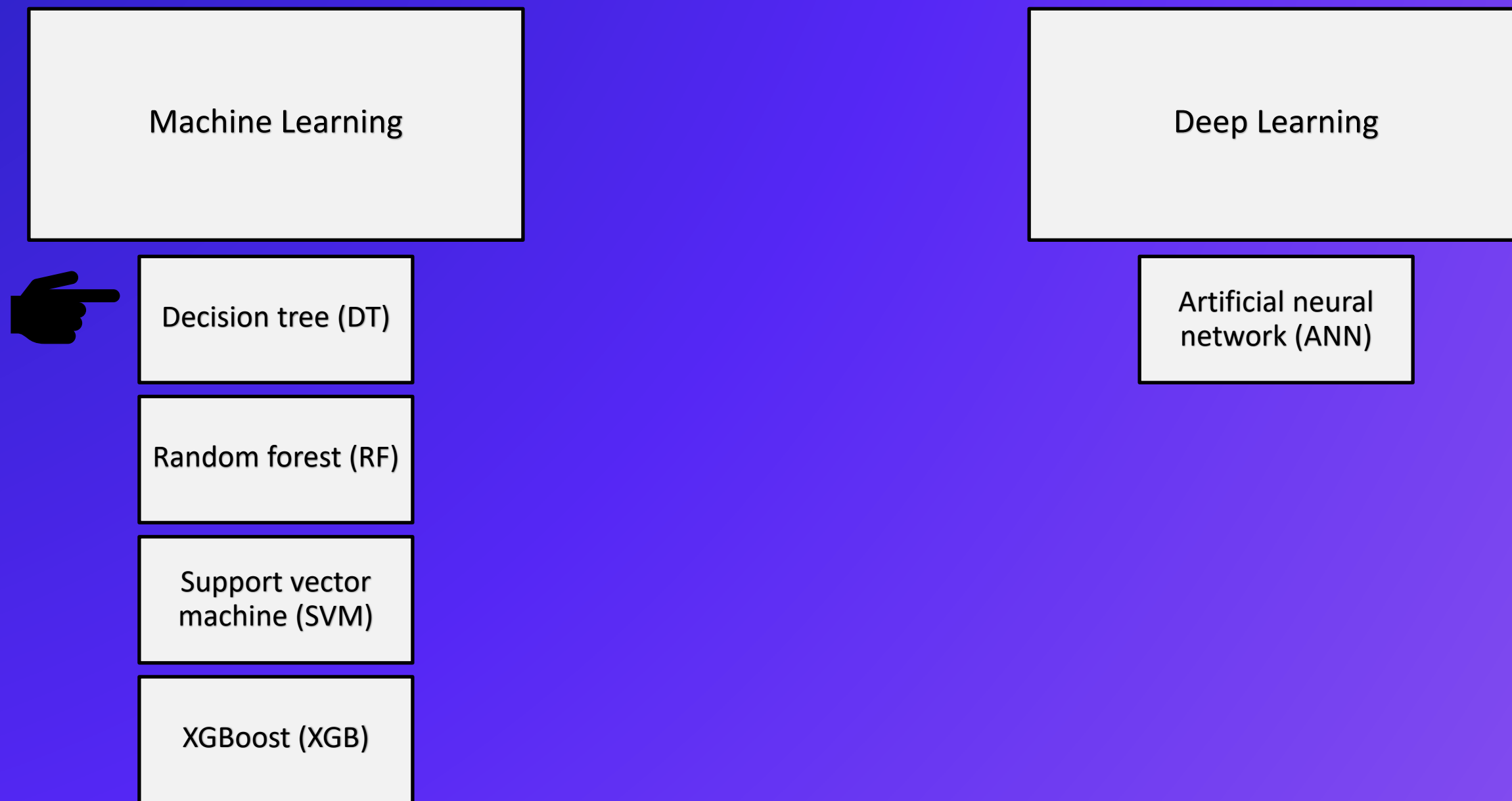


Ref: <https://medium.com/nerd-for-tech/the-ideal-workflow-for-your-machine-learning-project-9df1a7125b17>

Algorithms for summer camp

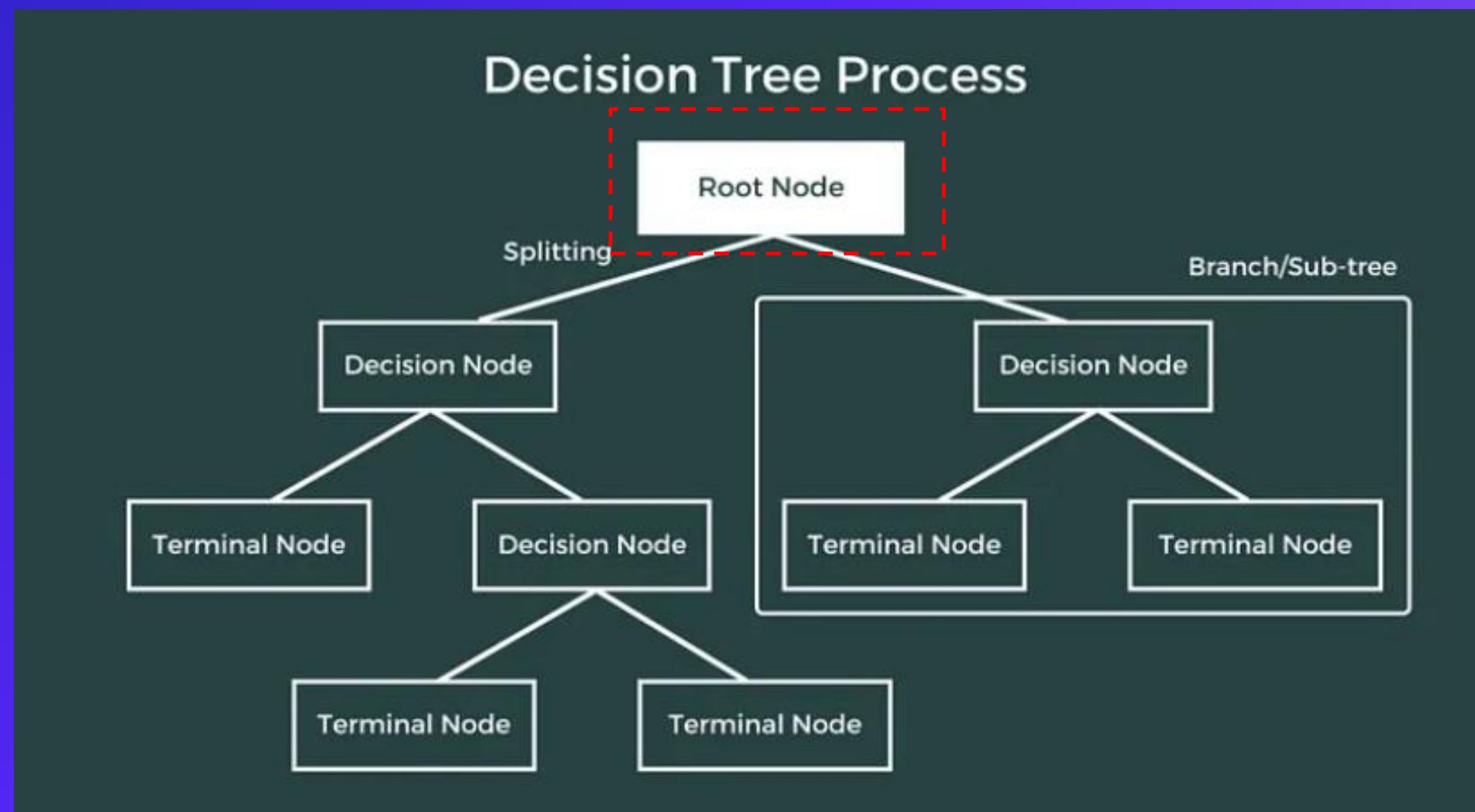


Algorithms for summer camp



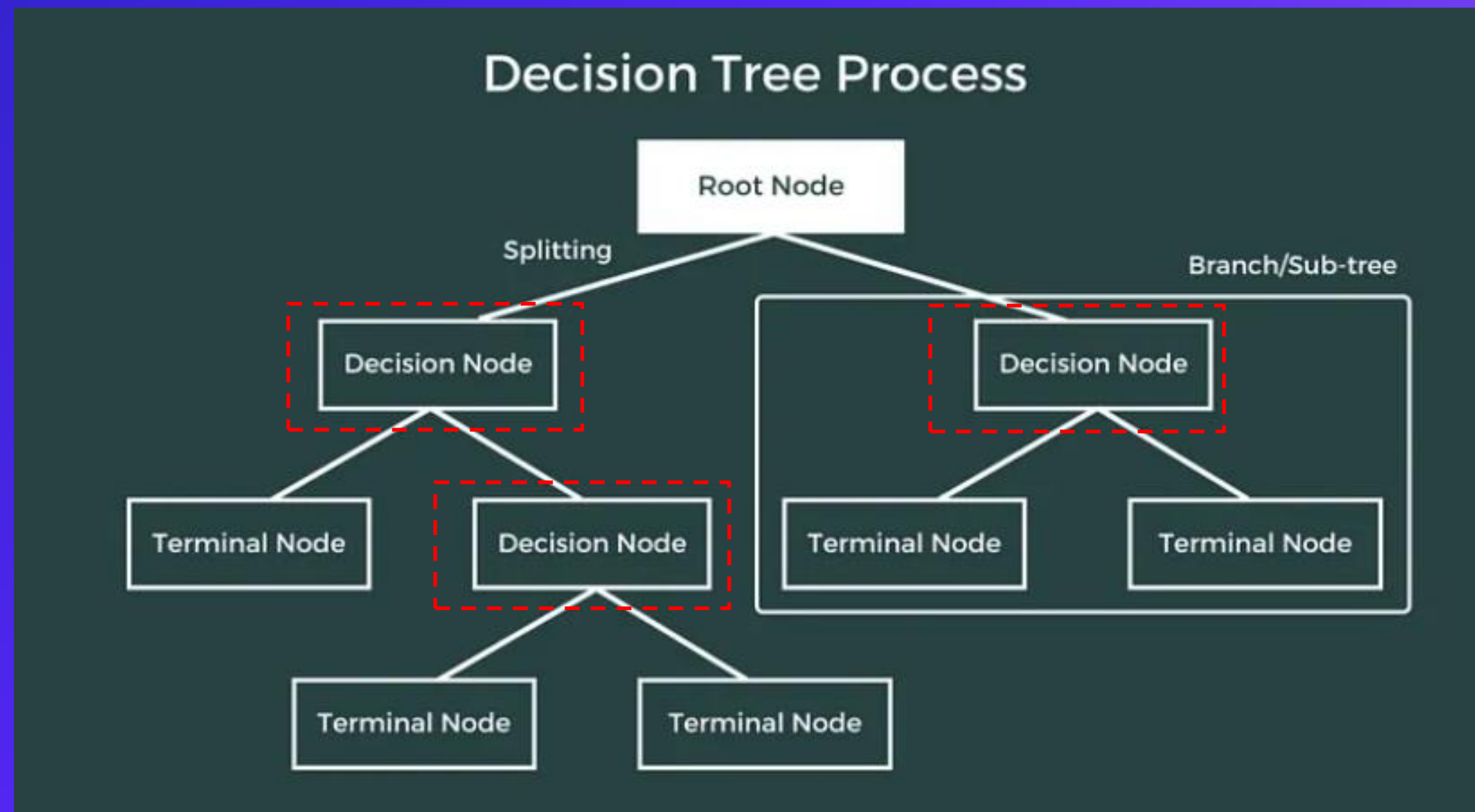
Decision tree algorithm

What is a Decision Tree?



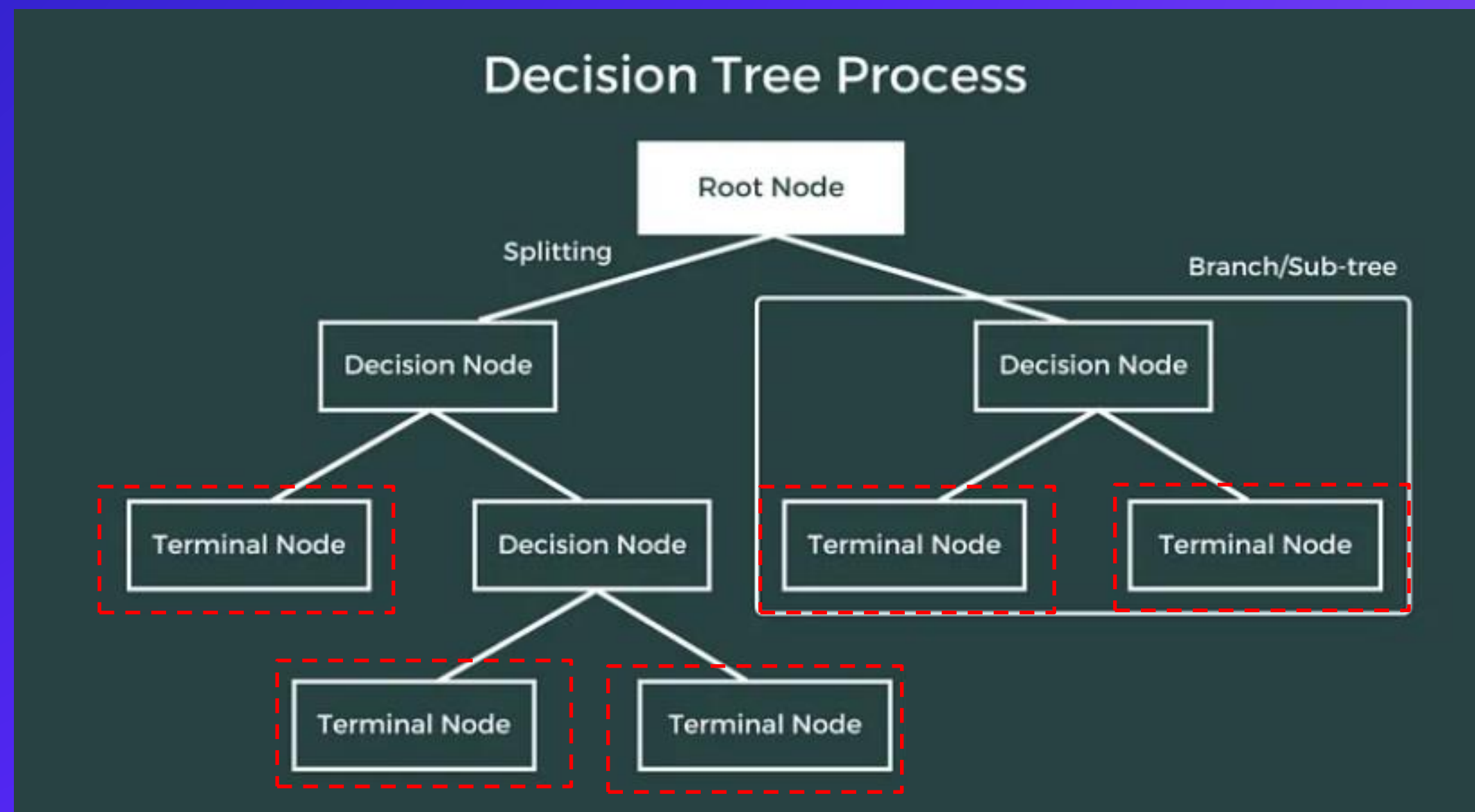
Decision tree algorithm

What is a Decision Tree?

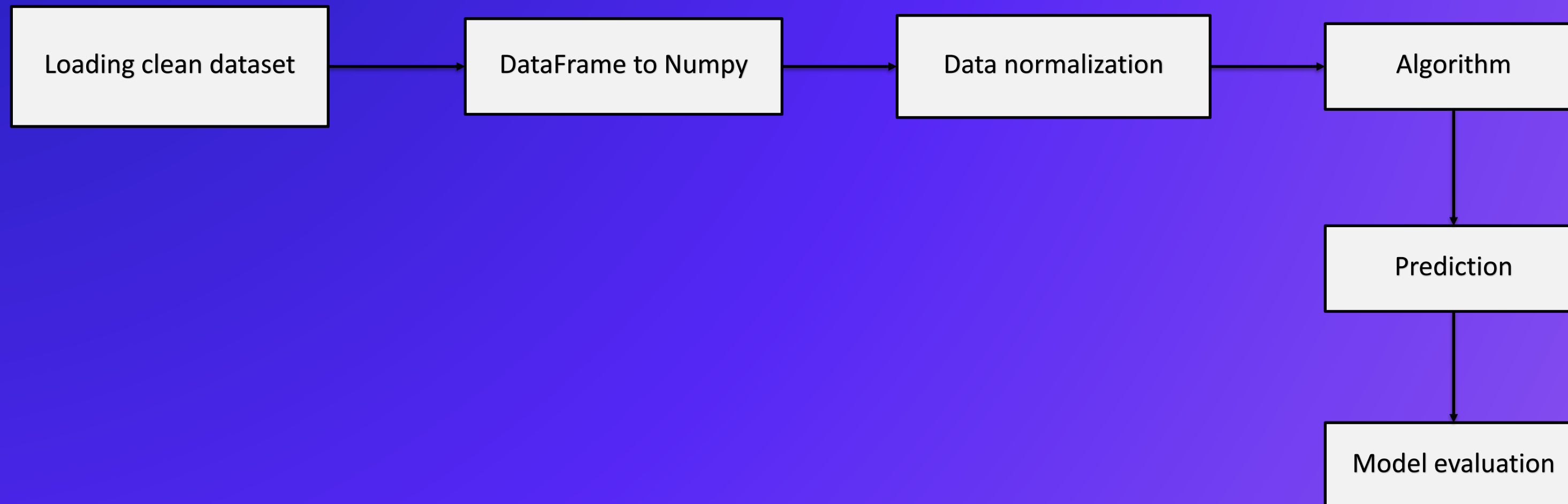


Decision tree algorithm

What is a Decision Tree?



Step in python



Model evaluation for regression

Mean Absolute Error (MAE)

$$MAE = \frac{1}{n} * \sum |prediction - actual|$$

Mean Squared Error (MSE)

$$MSE = \frac{1}{n} * \sum (prediction - actual)^2$$

Root Mean Squared Error
(RMSE)

$$RMSE = \sqrt{\frac{1}{n} * \sum (prediction - actual)^2}$$

Mean Absolute Percentage Error
(MAPE)

$$\left(\frac{1}{n} \sum \frac{|Actual - Forecast|}{|Actual|} \right) * 100$$

R^2

$$R^2 = 1 - \left(\frac{\sum (y - \hat{y})^2}{\sum (y - \bar{y})^2} \right)$$

Lab for decision tree

THANK YOU!

