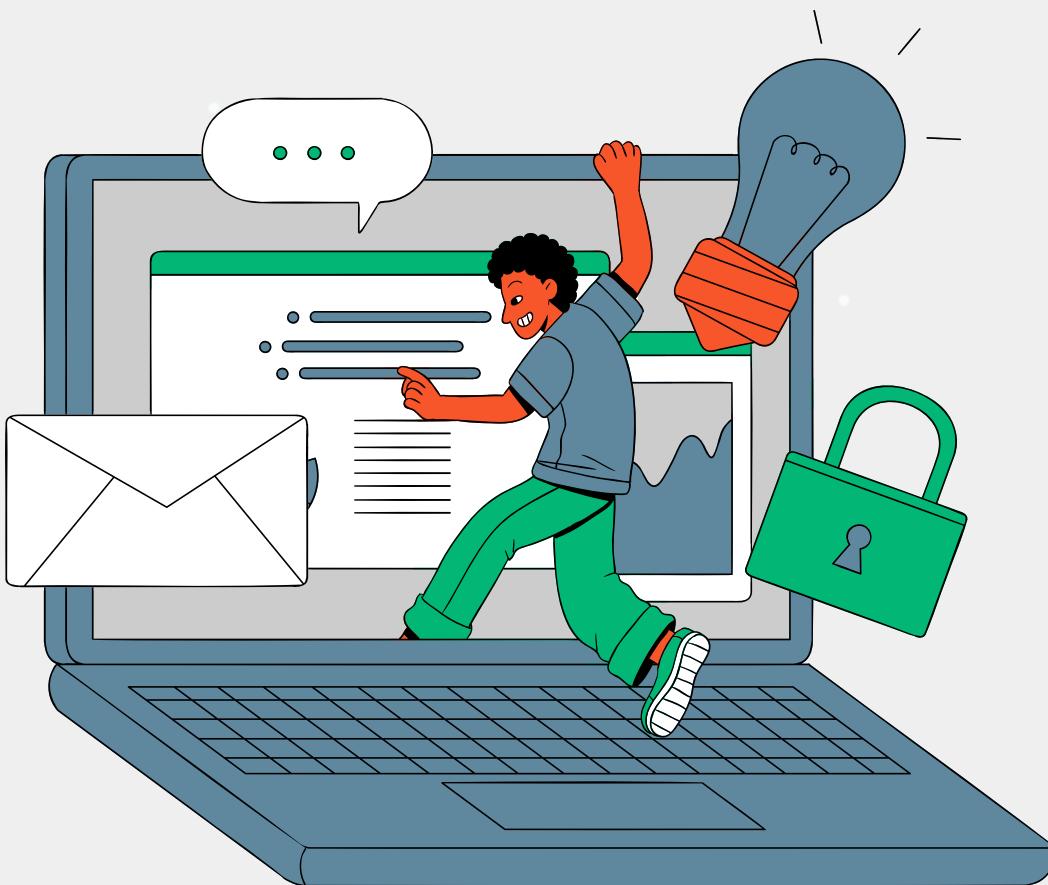


DATA SCIENCE

PRESENTED BY:ALAA ELNAKEEB



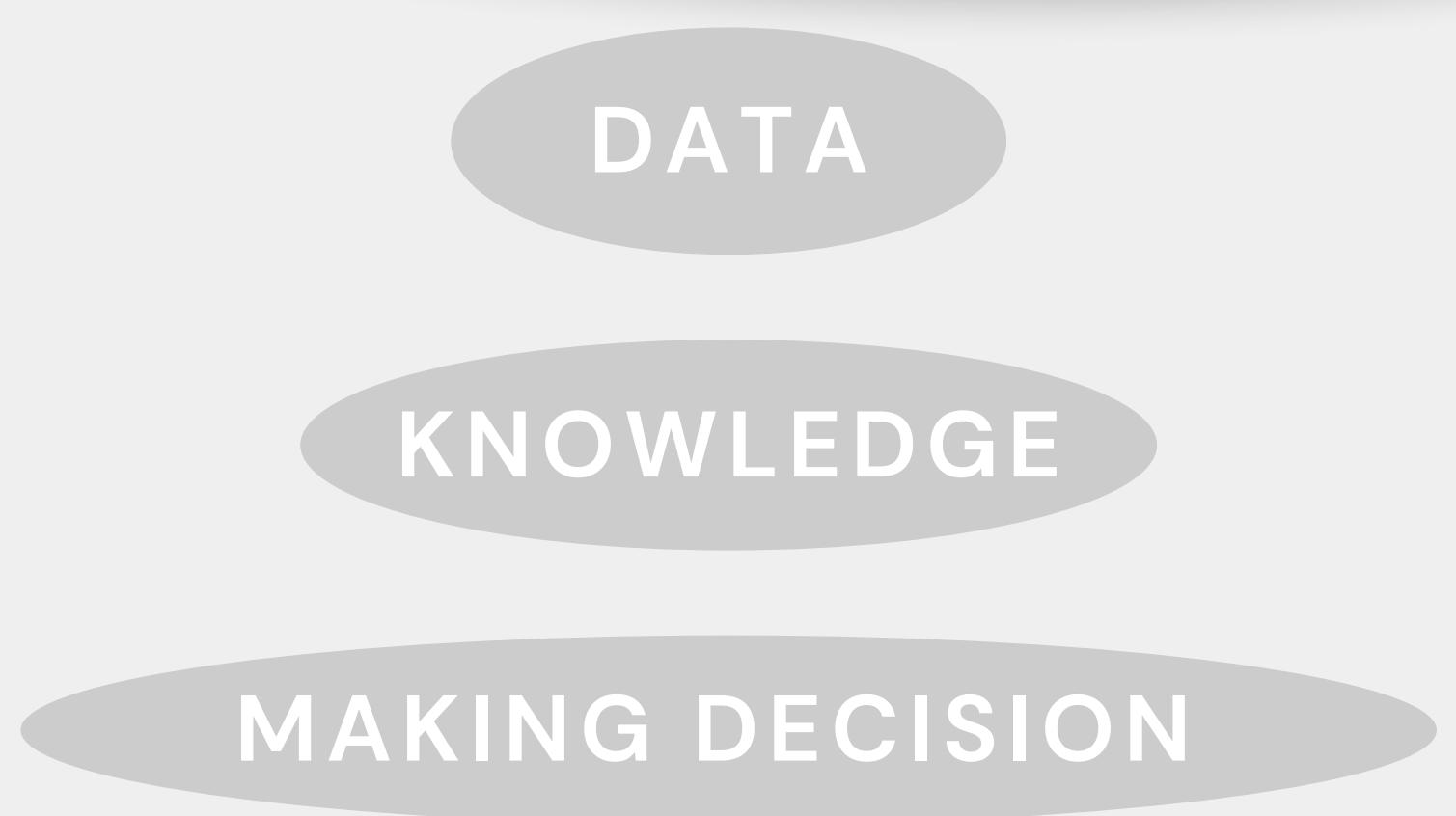
AGENDA



- 01** INTRO ABOUT DATA SCIENCE
- 02** WHAT IS DATA?
- 03** WHAT IS DATA SCIENCE?
- 04** WHICH SKILLS SHOULD DATA SCIENTIST HAVE?
- 05** DIFFERENCE BETWEEN DS ,DA AND ML
- 06** ROADMAP
- 07** SOME ADVICES



INTRO ABOUT DATA SCIENCE



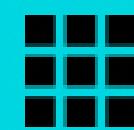


WHAT IS DATA

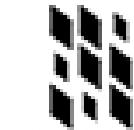


Data is a commodity which is wrapped with a process to make it valuable

[link](#)



Structured Data



Unstructured Data



VS

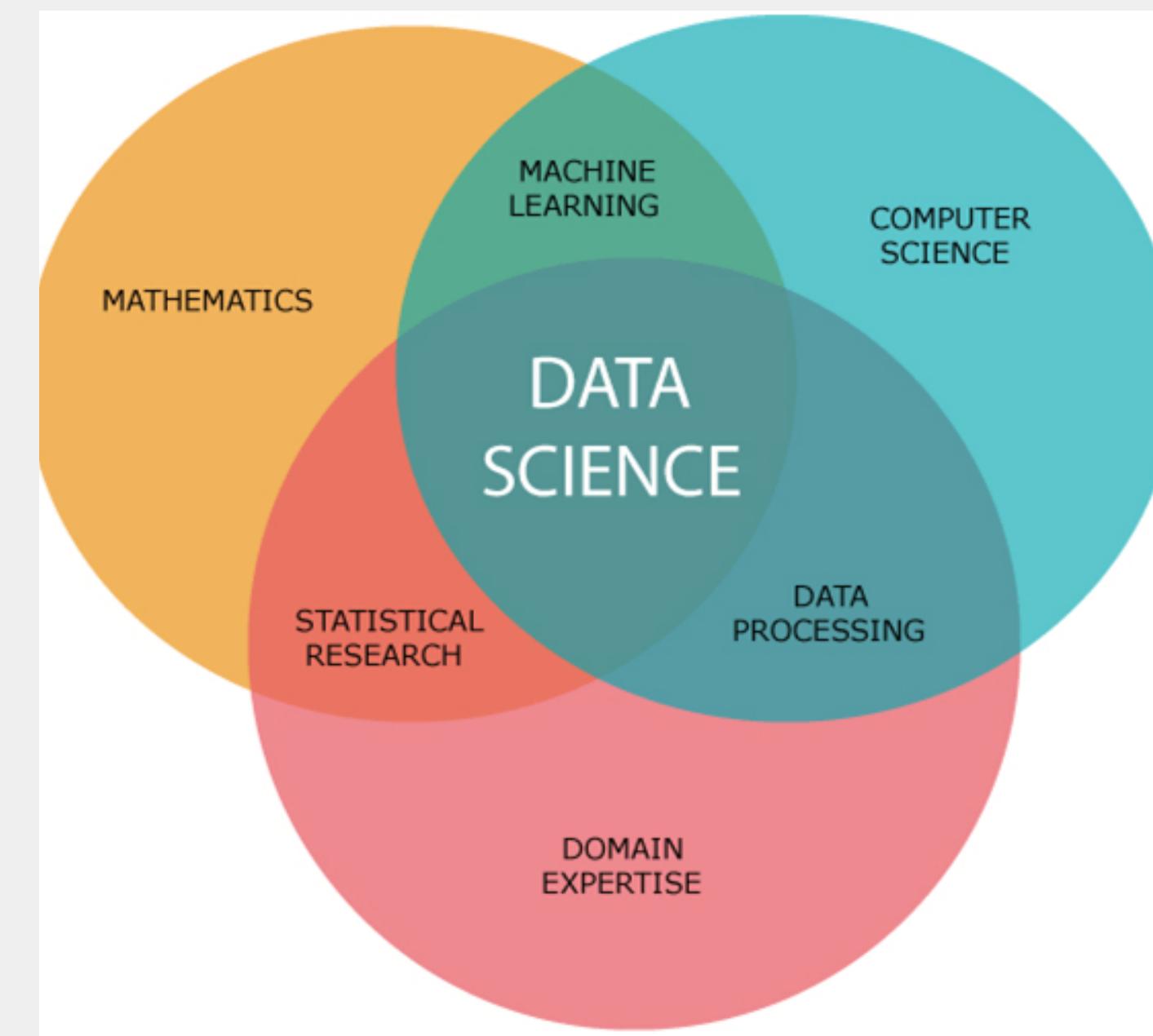
WHAT IS DATA SCIENCE

A “concept to unify statistics , data analysis ,machine learning and their related methods” in order to understand and analyze actual phenomena with data.

1-Descriptive Analysis

2-Predictive Analysis

3-perspective Analysis



DATA SCIENCE PROCESS

IDENTIFY BUSINESS
PROBLEM



RESPONSIBLE DATA
STEWARDSHIP



ACQUIRE DATA



PREPARE DATA



EXPLORATORY
ANALYSIS & MODEL
DEVELOPMENT



SELECT
DATA MODEL



APPLY DATA SCIENCE
METHODOLOGY SUCH
AS MACHINE
LEARNING

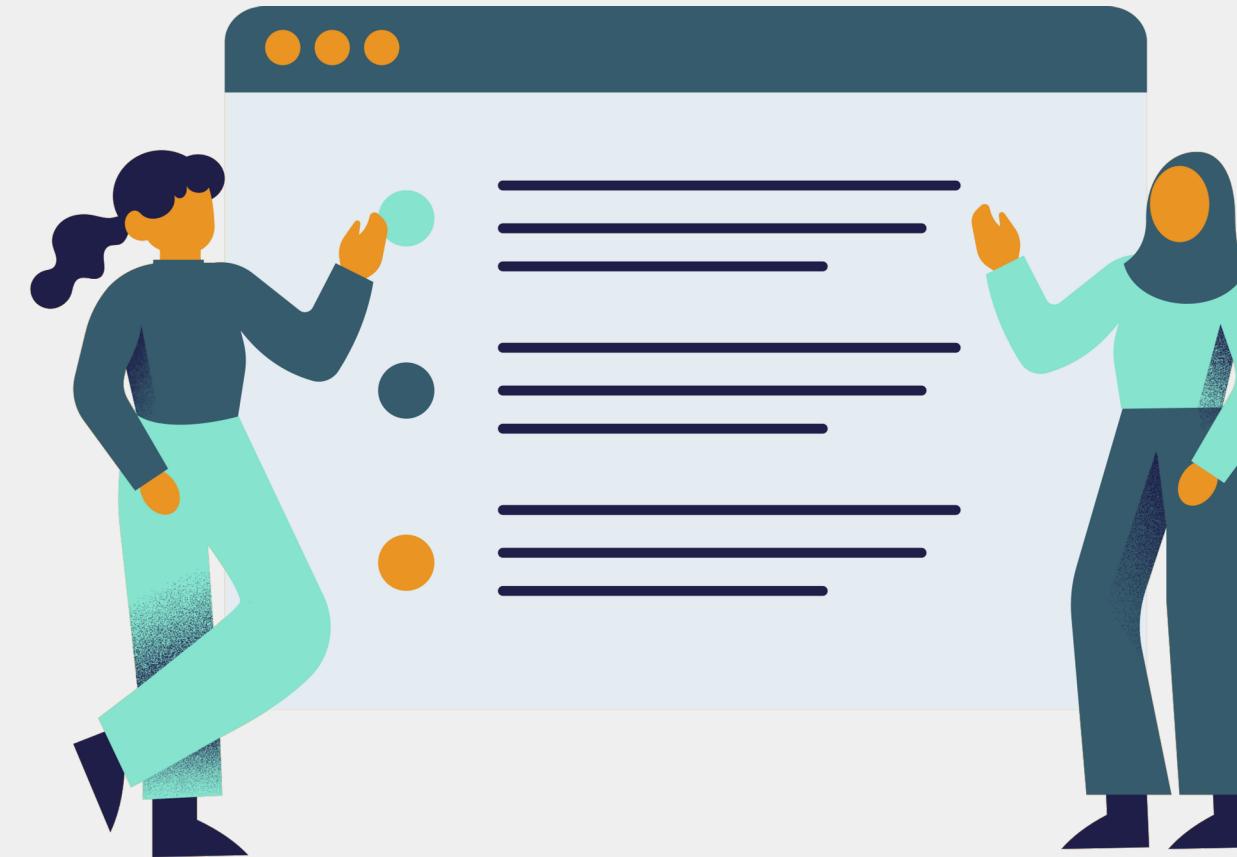


COMMUNICATE AND
VISUALIZE DATA

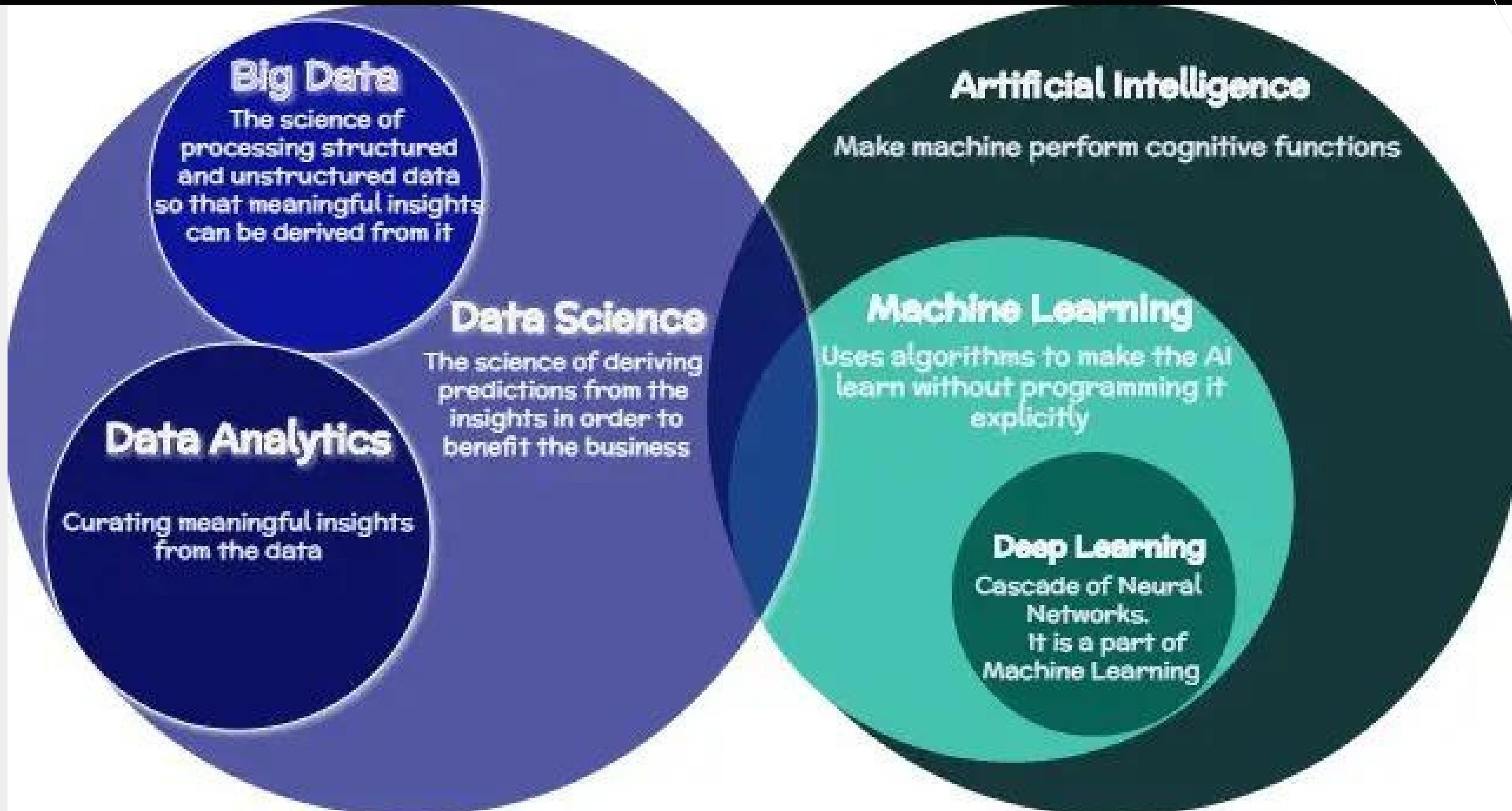


SKILLS SHOULD HAVE TO BE DATA SCIENTIST

skill	preprquisites	job
1-Programming (Python or R)		Data analyst
2-Data Wrangling & Visualization	Statistics	
3-Machine Learning	Calculus ,Linear Algebra & Probability	Data Scientist



DS Vs DA Vs ML



Data Analysis in a Nutshell

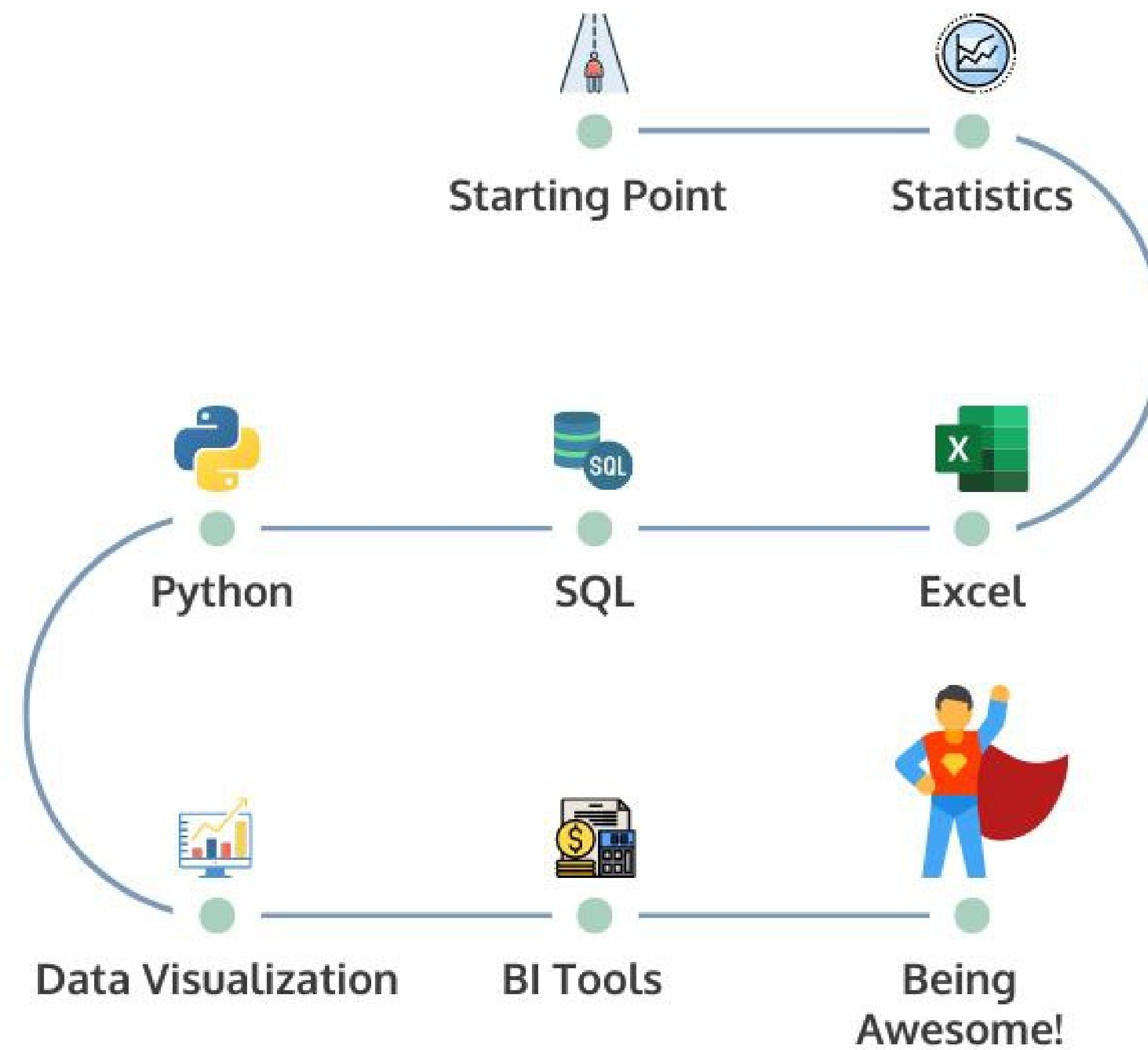


- Missing Data
- Duplicate Data
- Validate Data Types

- Data Exploration (EDA)
- Statistical Analysis
- Formulating Hypothesis

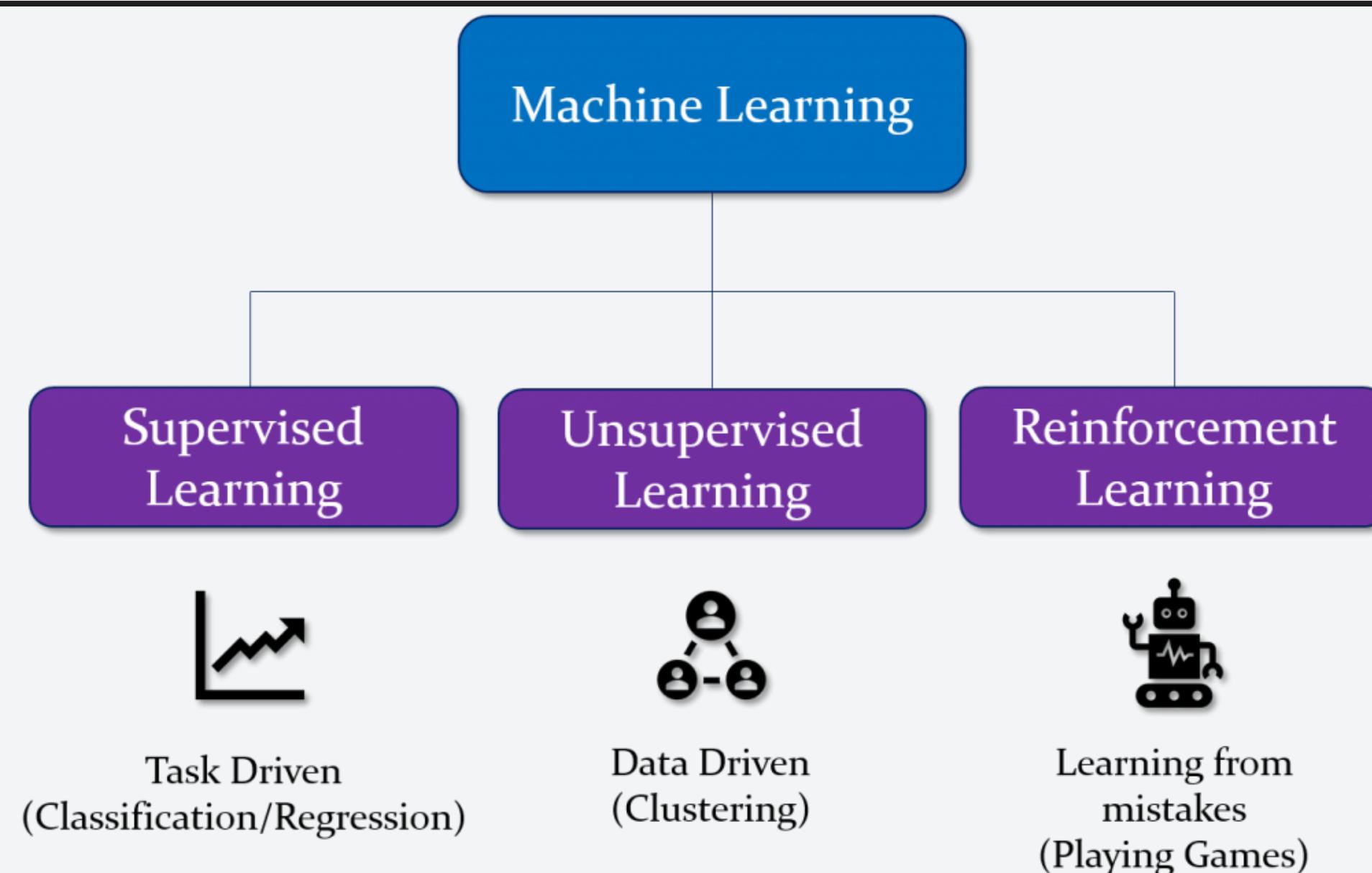
- Know Your Audience
- Select the Best Visuals
- Build Dashboards

Roadmap to Become a Data Analyst

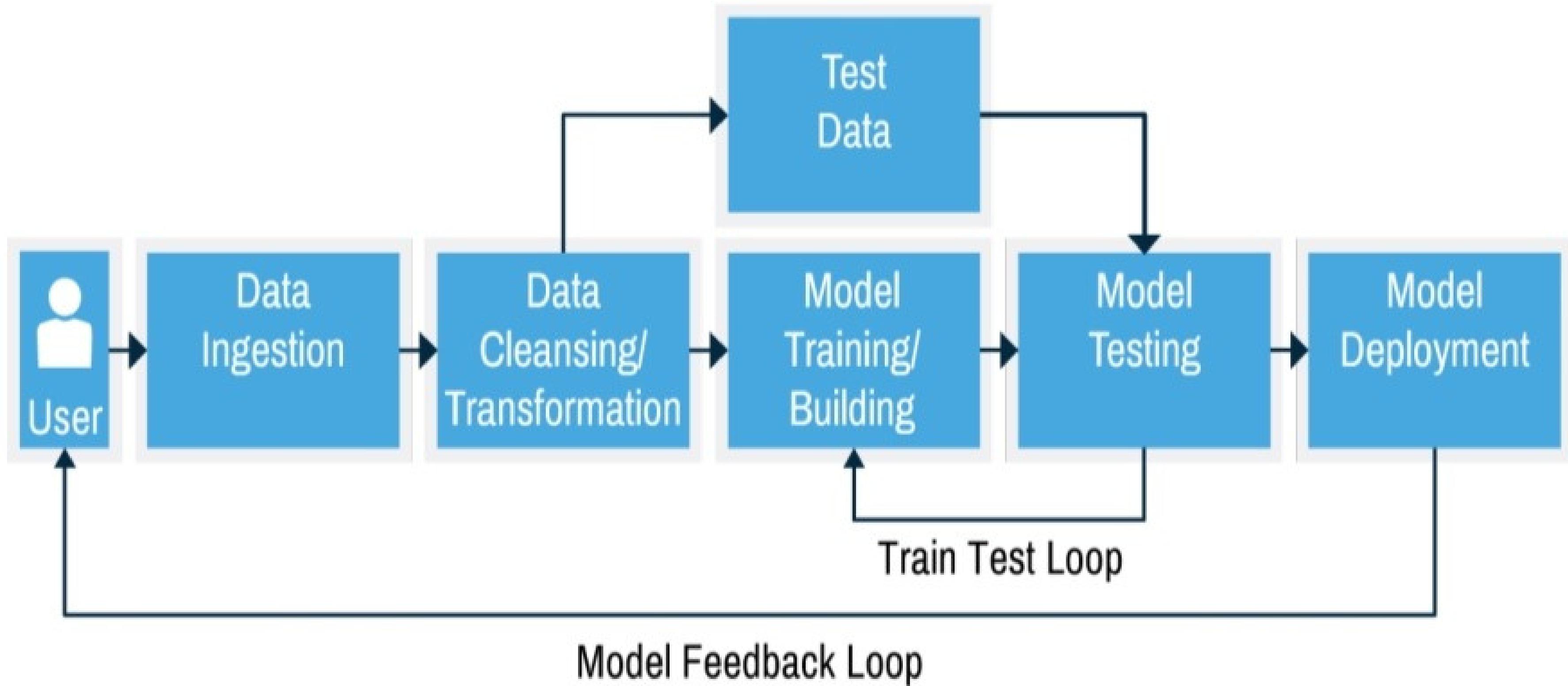


Machine learning

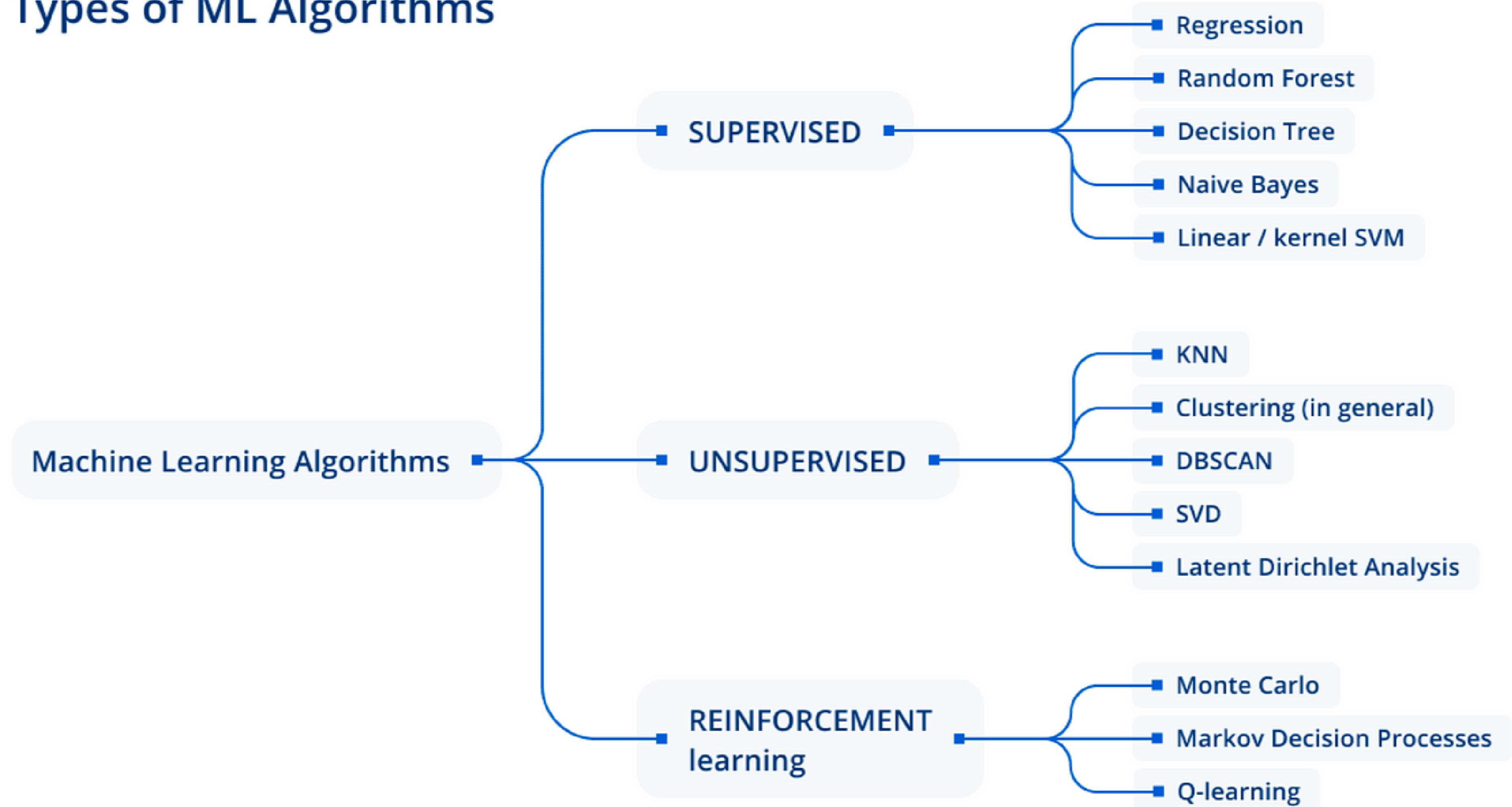
Machine learning is a branch of artificial intelligence (AI) and computer science which focuses on the use of data and algorithms to imitate the way that humans learn, gradually improving its accuracy



ML work flow

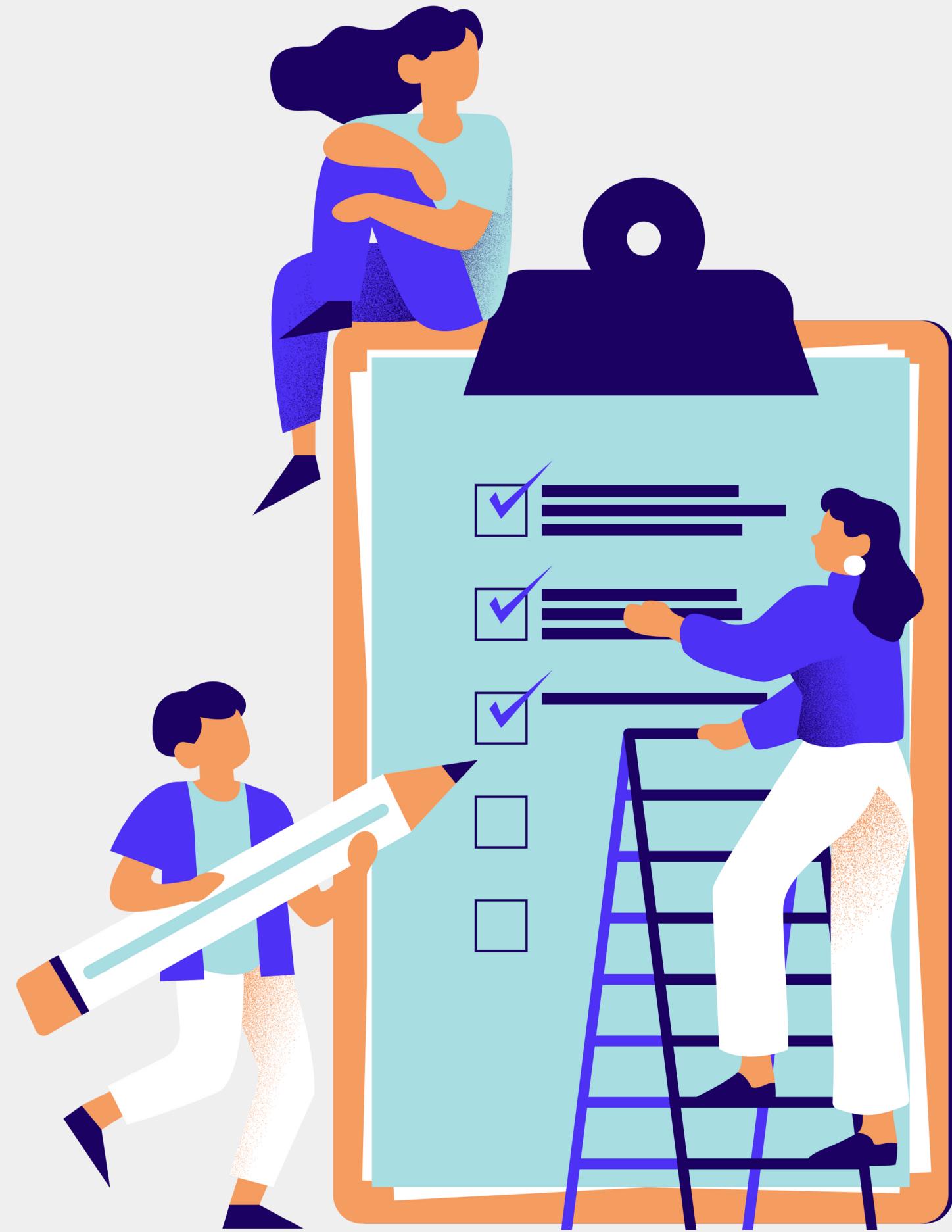


Types of ML Algorithms



The best roadmap for DS

[githupLearningDataScience](https://github.com/githupLearningDataScience)



Data Scientist

Roadmap



THANK YOU!

