KICKSTART YOUR MACHINE LEARNING JOURNEY

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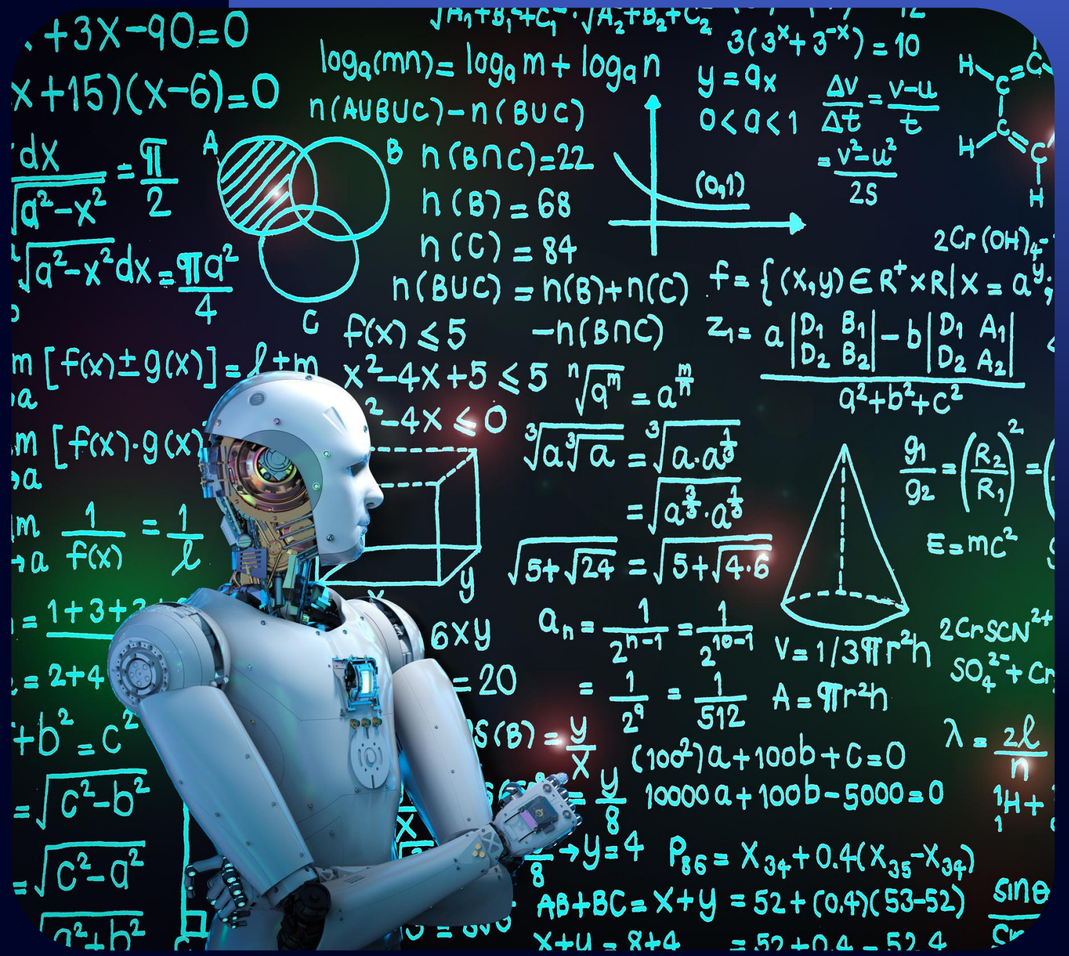
What is Machine Learning?

- Machine learning (ML) is a branch of artificial intelligence (AI) that focuses on building systems that can learn and make decisions or predictions from data without being explicitly programmed.

- Machine learning enables computers to learn and improve from experience.



Key Components of Machine Learn

1 **Data**

Machine learning models rely on large amounts of data to learn patterns.

2 **Algorithms**

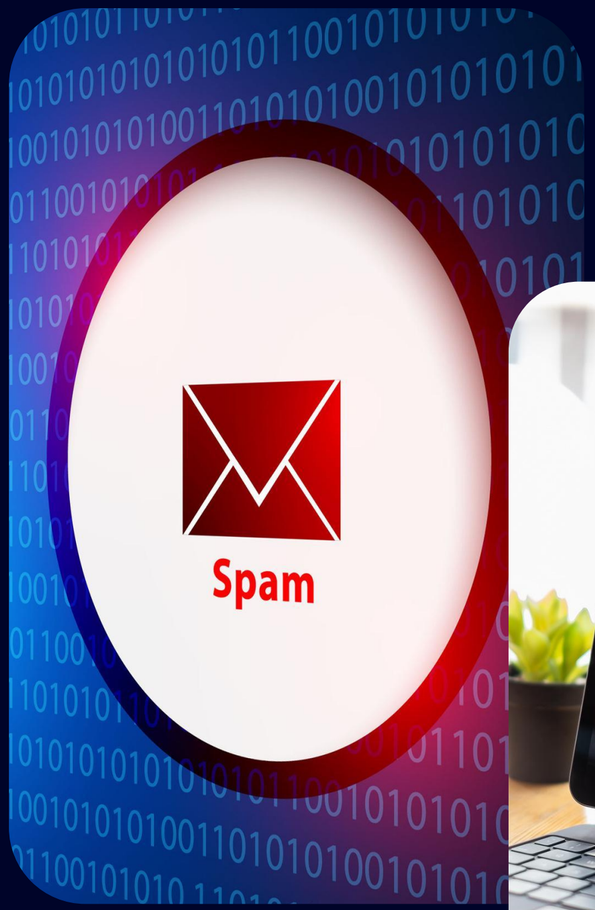
These are the mathematical and statistical methods that allow the system to learn.

3 **Models**

After training, the algorithm produces a model that can make predictions or decisions.

4 **Training**

The process of feeding data to the algorithm so it can learn and adjust its parameters.



Real-World Examples

1

Email Spam Filtering

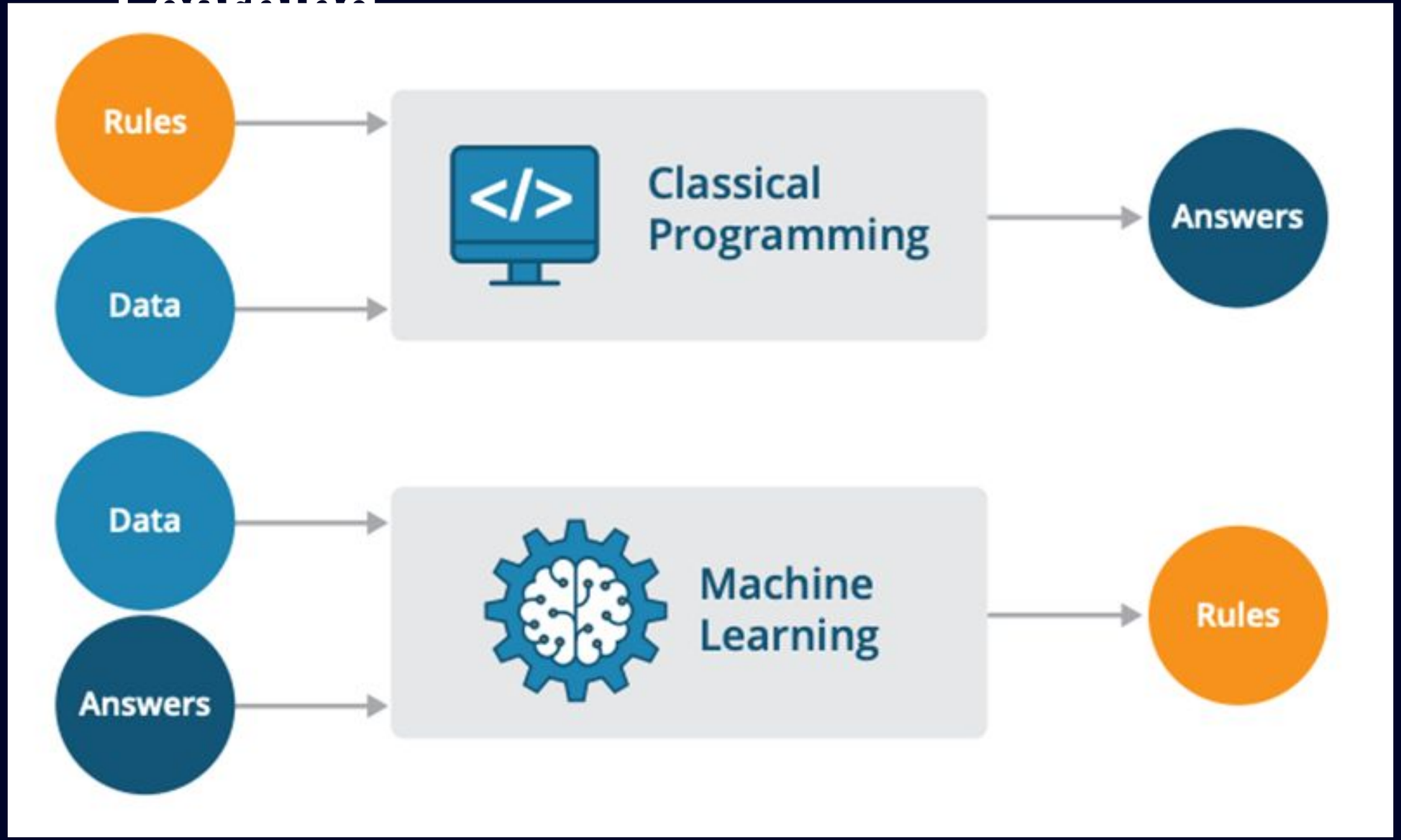
Machine learning is used to classify emails as spam or not based on patterns observed in past email data

2

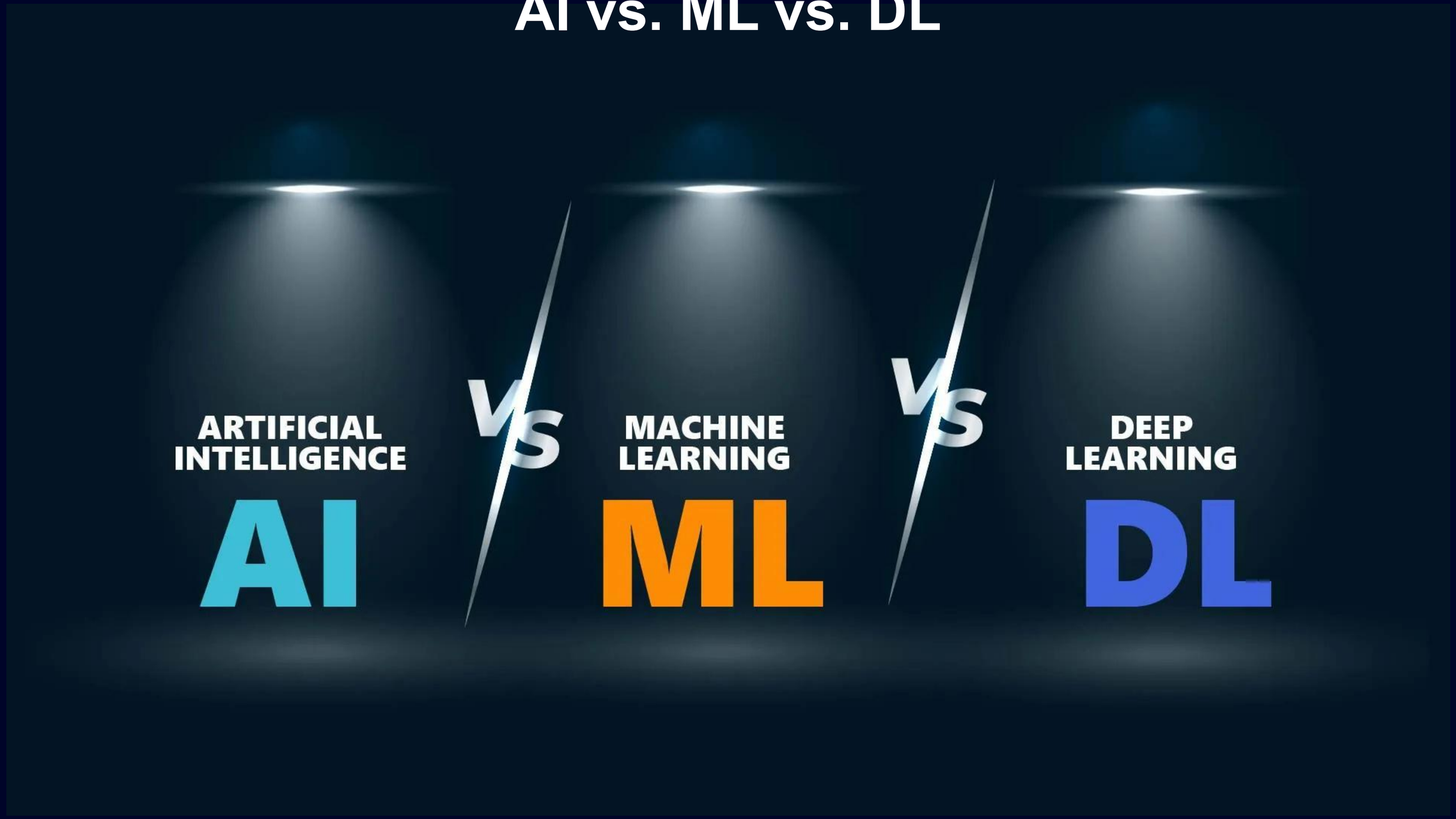
Recommendation Systems

Streaming services like Netflix and Spotify to recommend movies, shows, and music based on users' past behavior and preferences.

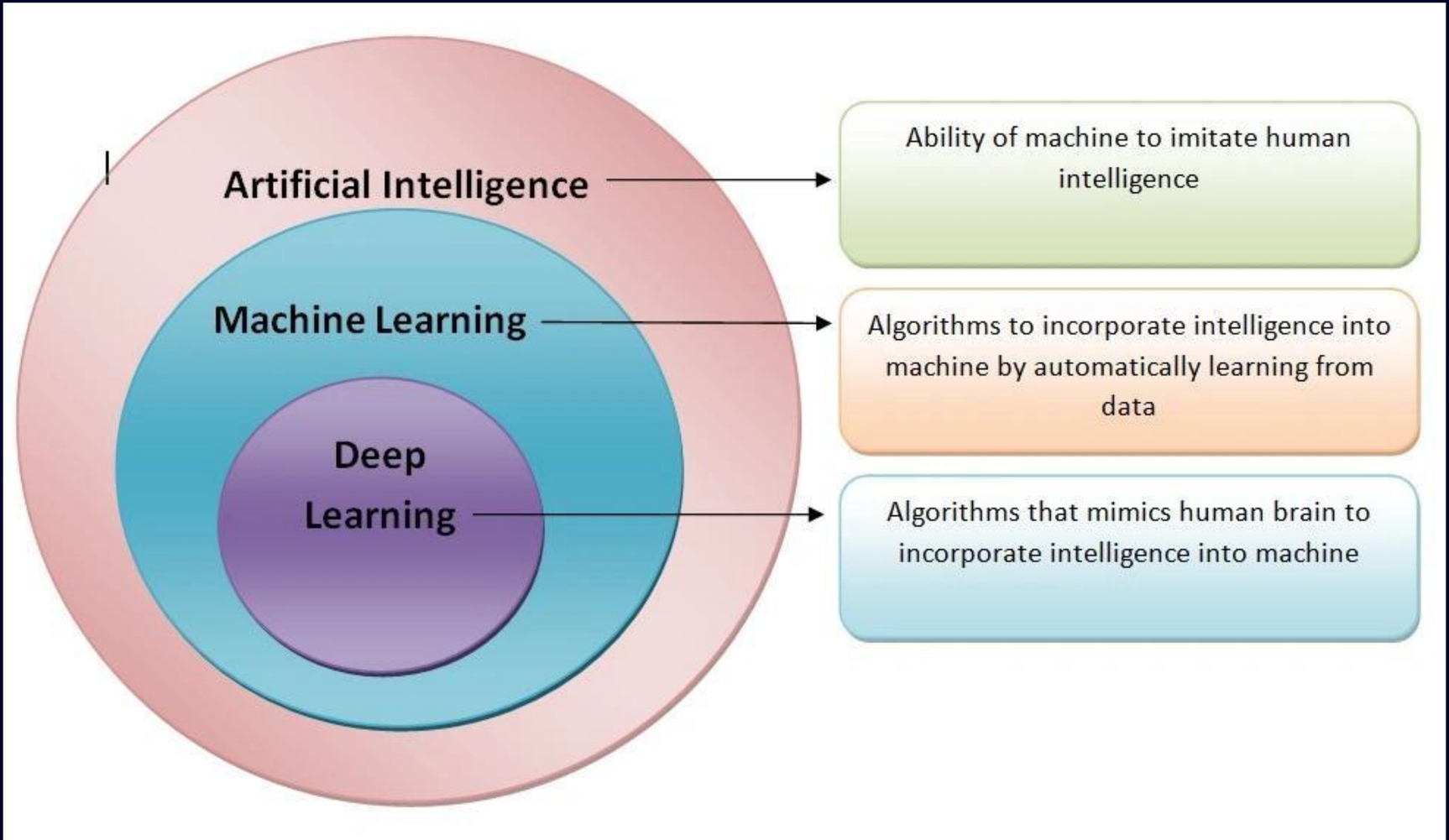
Traditional Programming vs. Machine Learning



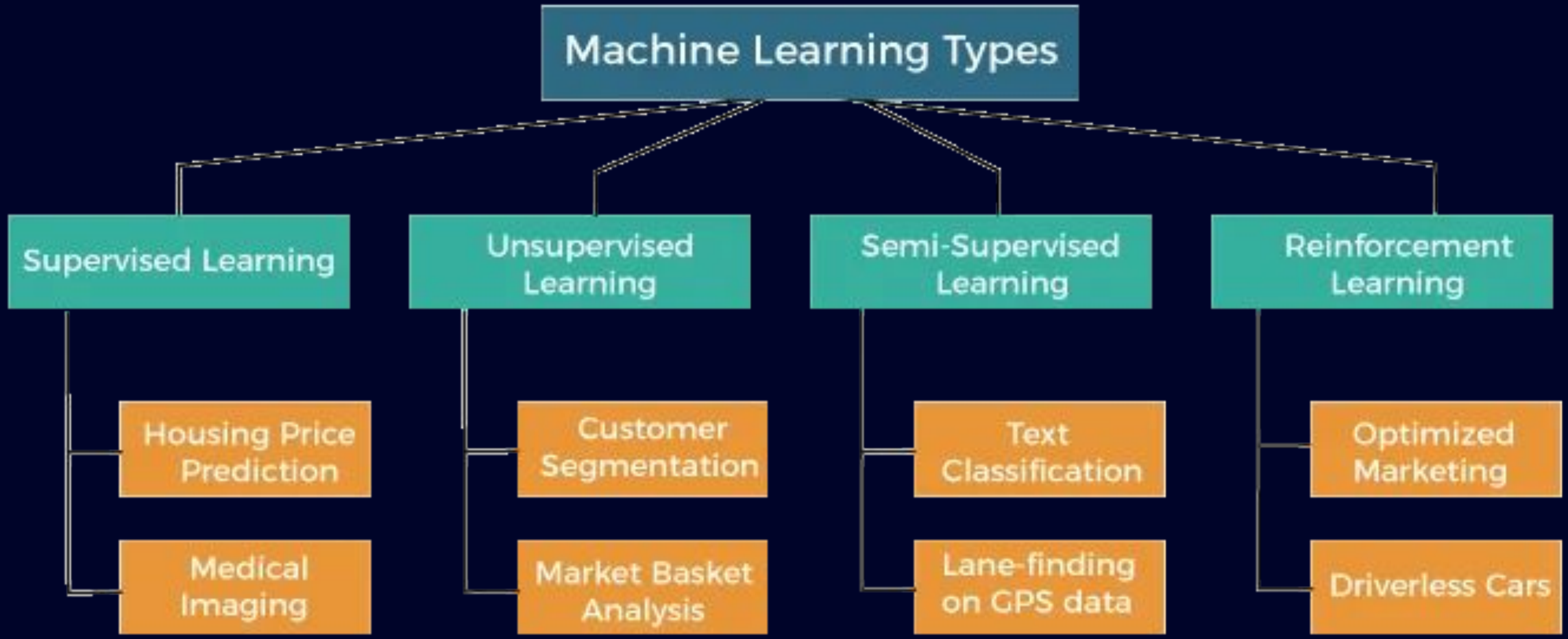
AI vs. ML vs. DL


ARTIFICIAL INTELLIGENCE
AI
VS
MACHINE LEARNING
ML
VS
DEEP LEARNING
DL

AI vs. ML vs. DL


Artificial Intelligence
Machine Learning
Deep Learning
Ability of machine to imitate human intelligence
Algorithms to incorporate intelligence into machine by automatically learning from data
Algorithms that mimics human brain to incorporate intelligence into machine

Types of Machine Learning



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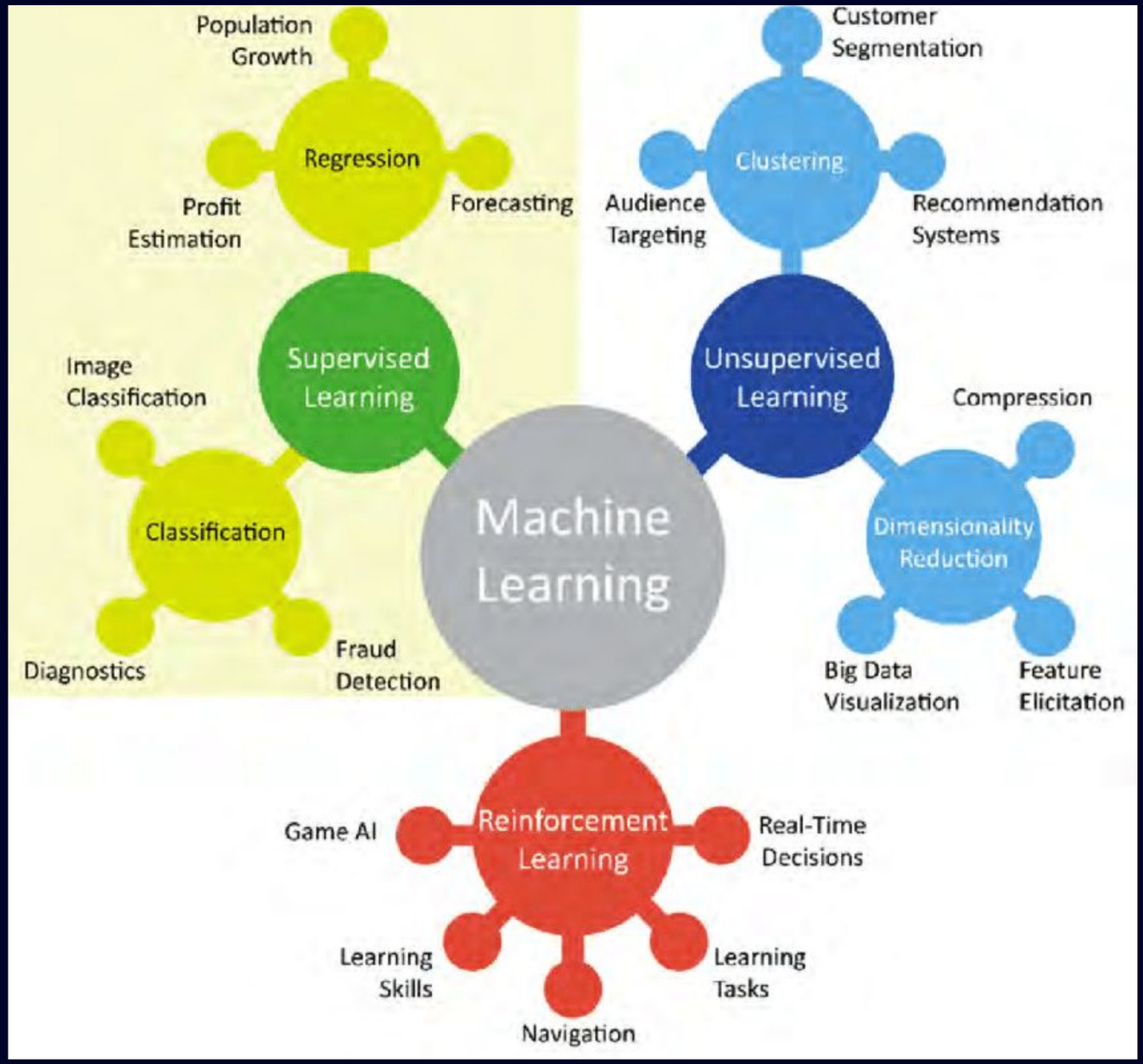
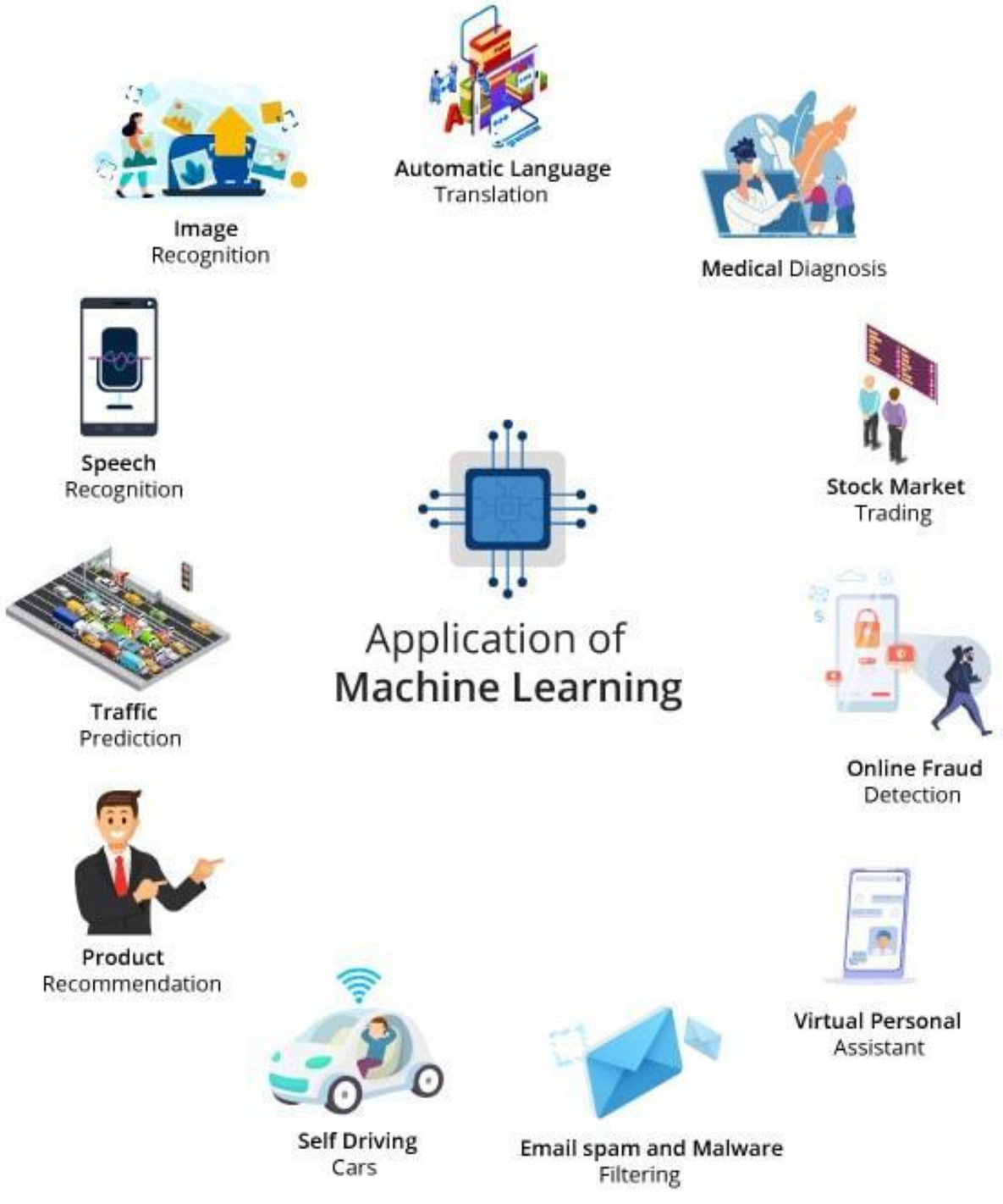
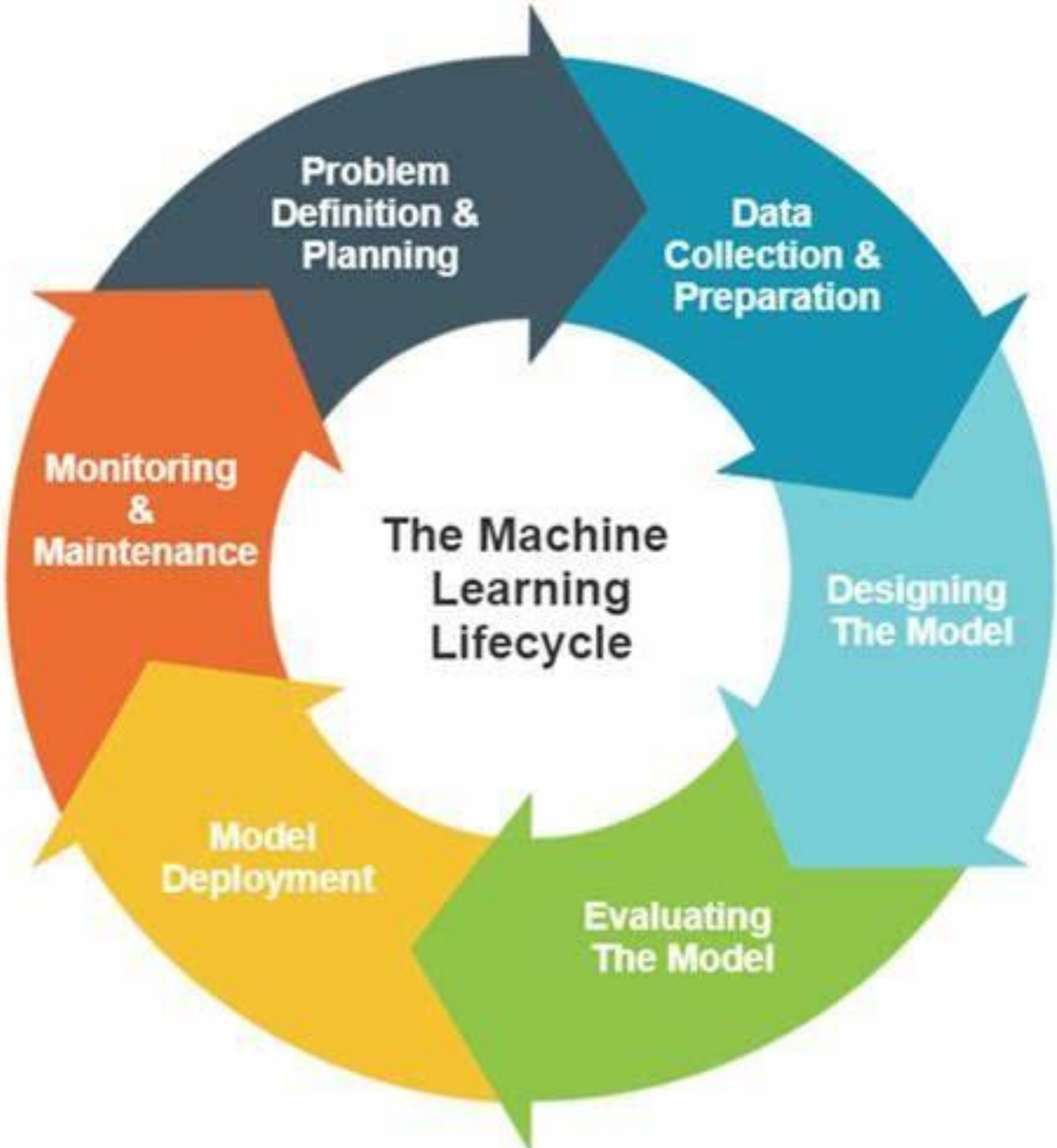


Applications of Machine Learning



Machine Learning

Development Life Cycle



Tools for Machine Learning

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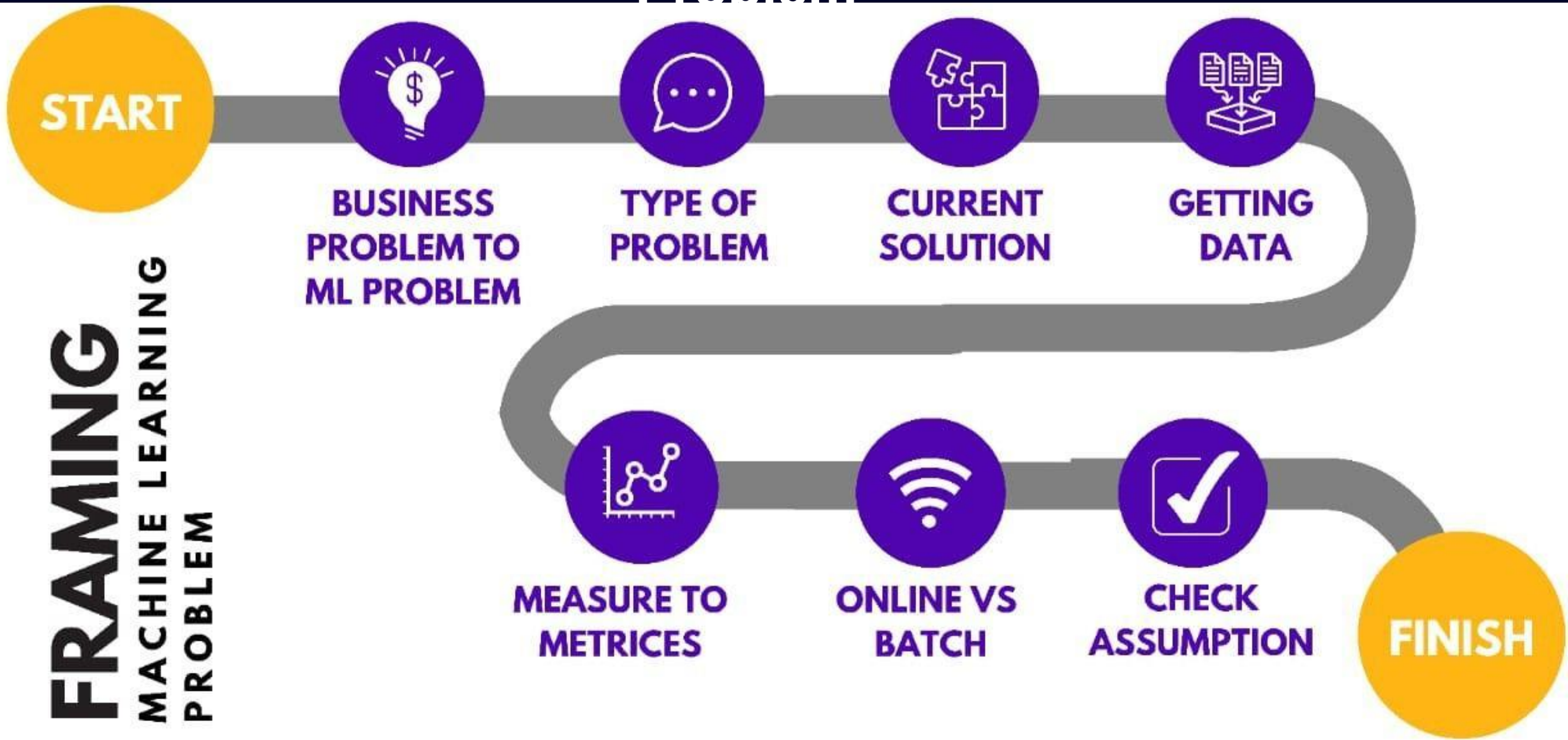
Batch Learning Vs Online Learning

How to Frame a Machine Learning Problem



Batch Learning Vs Online Learning

Any Question, feedback or comment?