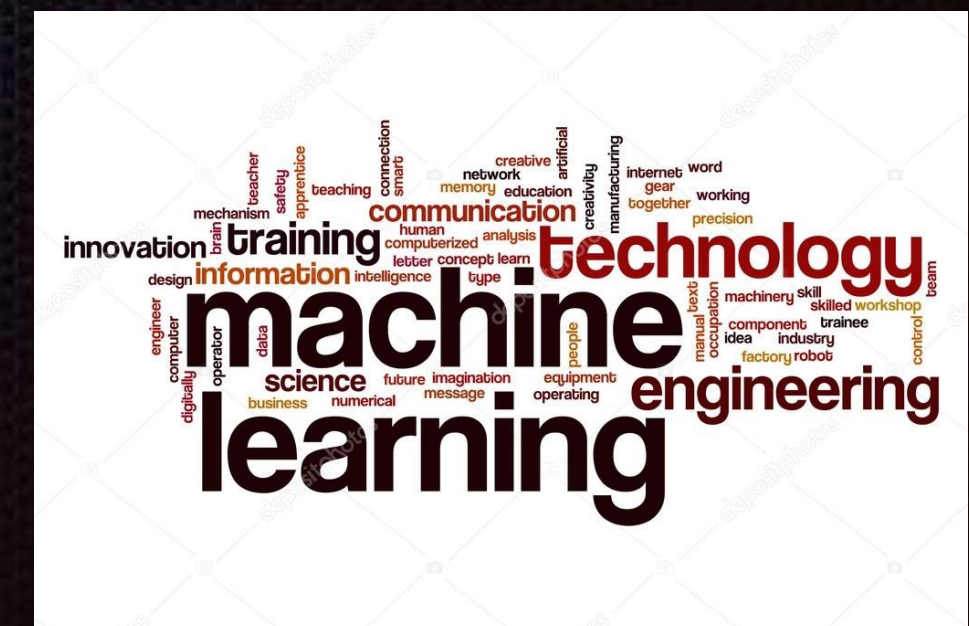# What is ML?

- Algorithms that ingest data and adapt to mimic and express inherent data patterns

  - Learns from data

  - Can provide predictions

- Algorithms can be

  - Simple (linear regression)

  - Complex (decision trees)

  - Indecipherable or magical (neural networks / deep learning)

What is ML?

- Algorithms that are mainly meant for prediction

    - Supervised learning

- They cannot often express why the predictions happen

    - What factors influenced the prediction in what way?

    - It's a function of the complexity of the model and our inability to express or comprehend that complexity easily

- Increasing research, emphasis on "explainable AI" or XAI

    - LIME, SHAP, others

    - Intrinsically explainable models (Microsoft)