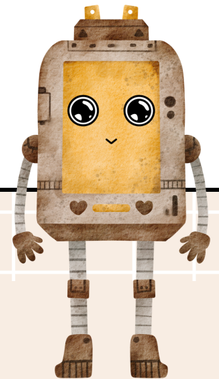
Machine Learning Course

Machine Learning

AI2YOU



Hello, everyone!

aminizahra - Overview

I'm interested in artificial intelligence, machine learning and data science and always looking for learning. - aminizahra

GitHub

LinkedIn

Zahra Amini

Machine Learning Lecturer | Interested in AI | 9 x Top Voice | Data Science

Filoger | Sirjan University of Technology

AI2YOU

Virtual Learning

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Sharing my knowledge with you 😉

YouTube

Zahra Amini | Master

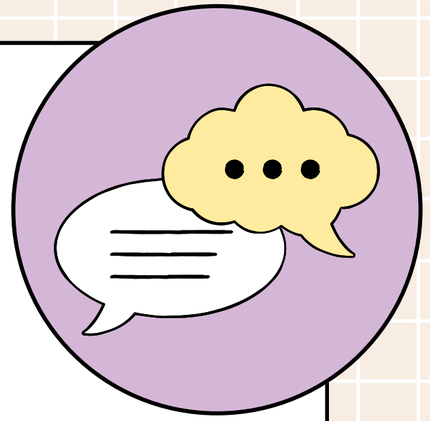
I'm Interested in artificial intelligence. Looking forward to continuing my education at a top university so I try hard to achieve that. I try to update myself in artificial intelligen...

Kaggle

My Profiles

Let’s Start But ...

Before we start our course,
let's think about a few questions:



What is your favorite? Why?

What is the best AI field? Why?

What is the best programming language? Why?

Today we will:

- Why are we here?
- What should we know?
- What will we learn?
- What are the tools we need?
- What are our platforms?

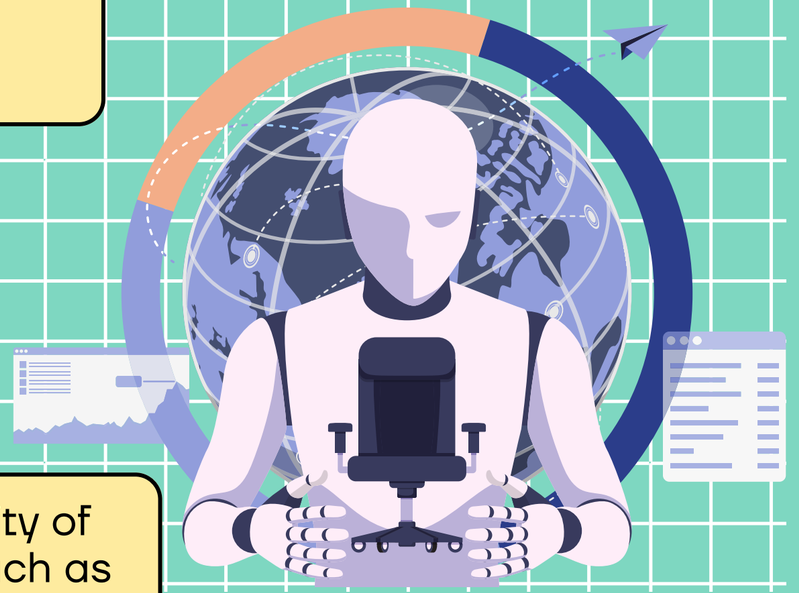
What is AI? ML?

Artificial Intelligence (AI) is the branch of computer science focused on creating systems that can perform tasks typically requiring human intelligence.

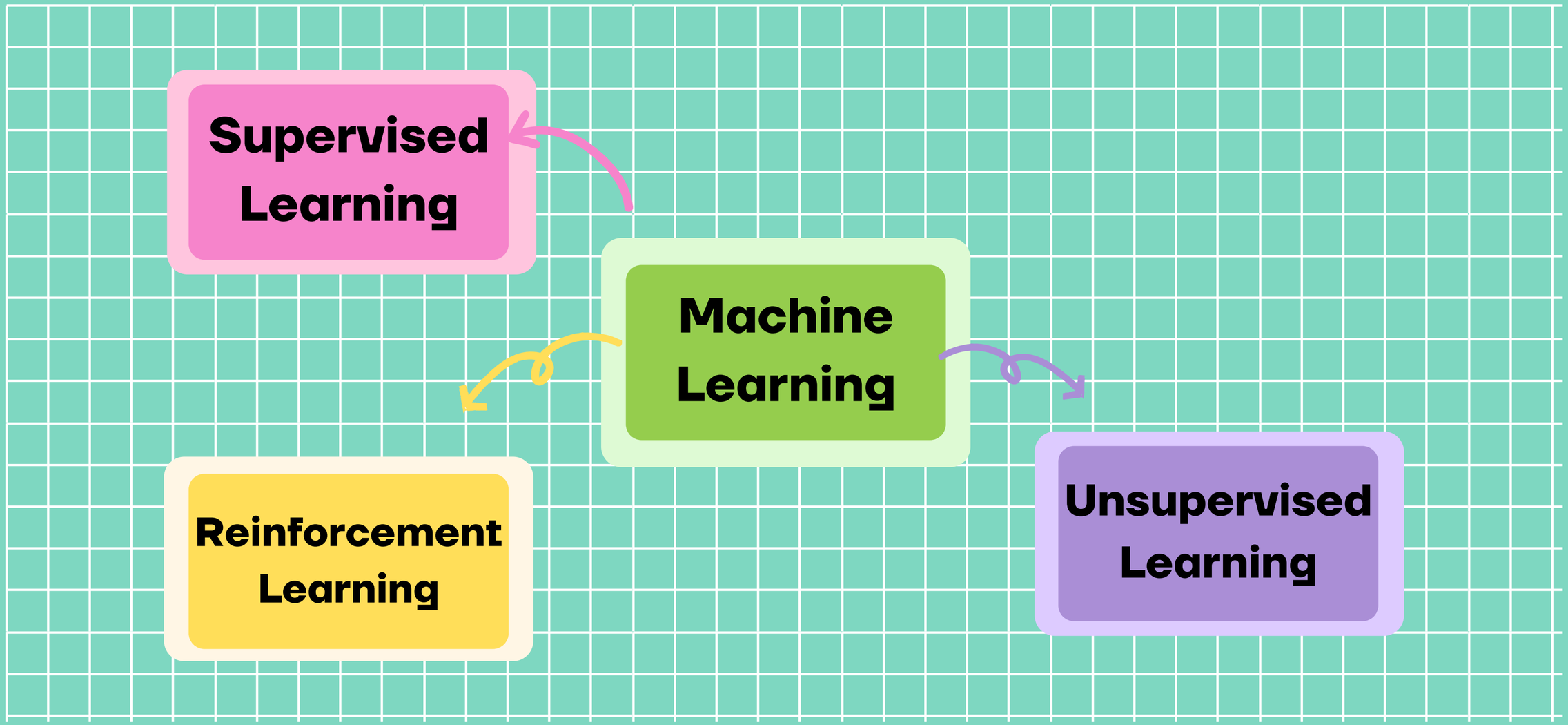
Machine learning is a field of computer science where algorithms learn from and make predictions or decisions based on data.

AI is a broader concept focused on creating machines capable of intelligent behavior, while ML is a subset of AI that involves algorithms learning from data to make decisions or predictions.

Intelligent behavior in the context of AI refers to the ability of machines or systems to mimic human-like capabilities such as learning, reasoning, problem-solving, perception, and language understanding.



ML ALGORITHMS



syllabus

Regression Analysis

- Linear Regression
- Polynomial Regression
- Logistic Regression (Classification Algorithm)

Optimization Techniques

- Gradient Descent (GD)

Data Preprocessing

- Data Cleaning
- Regularization

syllabus

Classification Algorithms

- K-Nearest Neighbors (KNN)
- Naive Bayes Classifier
- Support Vector Machine (SVM)
- Decision Trees (DT)
- Random Forest (RF)

Clustering Algorithms

- K-Means
- DBSCAN

(Density-Based Spatial Clustering of Applications with Noise)

Dimensionality Reduction

- Principal Component Analysis (PCA)

Enhancing Your CV with Professional Platforms

- ***Kaggle:*** *Assign data science competitions or exploratory data analysis on datasets from Kaggle.*
- ***GitHub:*** *Maintain a code repository for your assignments, promoting version control and collaboration skills*
- ***LinkedIn:*** *Sharing your projects or writing articles about your learnings, enhancing your professional online presence*

Platforms:

Communication

Telegram

- Conversation
- Announcements
- Introducing (LinkedIn, Github, Kaggle)

Online Classes

Google Meet

- Fixed Link
- Every Thursdays
- 19-21

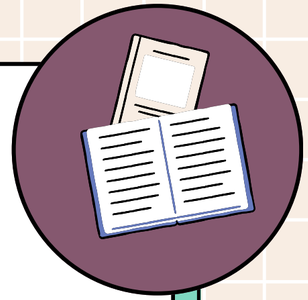
Videos

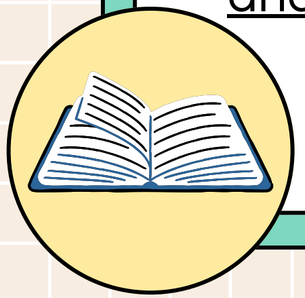
YouTube

- https://youtube.com/@AI2YOU

References

- Python for Data Analysis
- Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow
- Pattern Recognition and Machine Learning (Information Science and Statistics)





Thanks for your attention