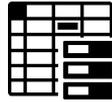


DATA X

Pandas

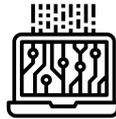
Introduction to Pandas

Pandas is a data analysis and manipulation tool built on top of Python.



Powerful Data Organization

Pandas helps **organize data by putting it in tabular form**. This makes the data easier to manipulate and analyze using Pandas functions.



Industry Standard Library

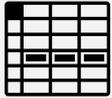
It is crucial to know Pandas for data manipulation tasks in industry and is one of the **most widely-used Python libraries**.



Necessary Foundation

Pandas provides the **foundation for more complicated applications** such as machine learning and NLP.

Pandas Features



Dataframes

Two-dimensional data structure with columns of potentially different types.



Data Selection

Inspects **specific sections** of a dataframe and **selects subsets** to analyze.



Data Cleaning

Handles **null values**, changes **indices**, and **renames columns**, among other functions.



Grouping and Sorting

Groups, sorts, and filters data by various different parameters.



Statistics

Basic statistics such as **mean, median, correlation, standard deviation**, etc.



Visualizations

Plots data using various graphs such as bar charts, scatter plots, and pie charts.

Pandas Demo

[Demo](#)

DATA



Pandas Introduction

Author list: Ikhtlaq Sidhu & Alexander Fred Ojala

References / Sources: Includes examples from Wes McKinney and the 10 min intro to Pandas

License Agreement: Feel free to do whatever you want with this code

Topics:

1. Dataframe creation
2. Reading data in DataFrames
3. Data Manipulation