Data Analysis and Visualization using python

This course presents a gentle introduction to the concepts of data analysis, the role of a Data Analyst, and the tools that are used to perform daily functions. You will gain an understanding of the data ecosystem and the fundamentals of data analysis, such as data gathering or data mining. You will then learn the soft skills that are required to effectively communicate your data to stakeholders, and how mastering these skills can give you the option to become a data-driven decision maker.

Syllabus

- Fundamental Programming Concepts
- Basic Python Syntax
- Loops, Functions
- Conditional statements
- Basic Python Data Structures
- Python Packages and Modules
- Importing Your Own Code
- Installing Packages using PIP
- Data set
- Types of data sets
- Introduction numpy
- Python NumPy array
- operations on the Numpy array
- NumPy and random data
- NumPy array with images

- Introduction to pandas
- Series
- Data Frame
- Reading csv, excel, Json data
- Handling missing data
- Pandas group by
- Introduction to Seaborn
- Visualizing a Categorical and a Quantitative Variable
- Customizing Seaborn Plots
- Introduction to Plotly and Cufflinks
- Introduction to Geographical Plotting
- Introduction to Matplotlib

What you will learn

- Understand the landscape of Python data visualization libraries
- Create static and interactive charts using specialized Python libraries
- Saving the created charts for later use, including images and Office document formats

SKILLS GAIN

> " Artificial Intelligence, deep learning, machine learning—whatever you're doing if you don't understand it—learn it. Because otherwise, you're going to be a dinosaur within 3 years
>
> -Mark Cuban