**Couse1 : Data Science & Machine learning**

Duration: 12 hours

This course is designed for both beginners with some programming experience and experienced developers looking to make the jump to Data Science and Machine learning!

This course is designed to teach students, staff and professionals (industry-oriented), end of the course they will learn about

* Use Python for Data Science and Machine Learning
* Implement Machine Learning Algorithms
* Learn to use NumPy for Numerical Data
* Learn to use Pandas for Data Analysis
* Learn to use Matplotlib for Python Plotting
* Learn to use Seaborn for statistical plots
* Use Plotly for interactive dynamic visualizations
* Use SciKit-Learn for Machine Learning Tasks
* K-Means Clustering
* Logistic Regression
* Linear Regression
* Random Forest and Decision Trees
* Neural Networks
* Support Vector Machines

Agenda of this course :

This course will cover all the below topics in two days’ workshop:

* Programming with Python
* NumPy with Python
* Using pandas Data Frames to solve complex tasks
* Use pandas to handle Excel Files
* Connect Python to SQL
* Use Matplotlib and Seaborn for data visualizations
* Use Plotly for interactive visualizations
* Machine Learning with SciKit Learn, including:
* Linear Regression
* K Nearest Neighbors
* K Means Clustering
* Decision Trees
* Random Forests
* Natural Language Processing
* Neural Nets and Deep Learning
* Support Vector Machines

All the topics will be covered with examples and a sample code will be provided.

Handson will be provided with google Colab or VS code.