SECTION ONE

Topics	Objectives of learning this	Resources	Projects	Timeline
Python	-To learn to solve practical problems with python. -To further ground you with python libraries for data analysis.	Res	Project 1	3 - 5 weeks
Statistics ● Descriptive. ● Inferential	-To teach you how to work with more complex analysis, the mathematics behind some data science concepts, statistical approaches, and hypotheses.	Res 1 Res 2	Project 2	1 - 3months
Probability ● Combinatorics ● Inference. ● Distribution.	-To teach you the probability theory necessary to think like a data scientist.	Res 1 Res 2 Res 3	Project 3	1 - 3 months
Data Analysis 1. ● Pandas and Numpy.	-To enhance your coding ability by leveraging Numpy and Pandas, the most widely used python libraries in data science.	Res 1	Found in Project 4	1 week - 2 months
Data Analysis 2.	-You will learn to prepare data for analysis, perform real-life statistical analysis, and predict future trends from data.	Res 2	Project 4	
Data Visualization	-You will learn how to create interesting graphics and charts with Python, and customize them to identify patterns and trends in data.	Res	Project 5	1 week - 3 weeks
Tableau for Visualization	- To visualize data using the Tableau software. Tableau software	Res	Project 6	1 - 3 months

PowerBI for Visualization	-To gain a 360-degree overview of how to explore and use PowerBI to build impactful reports. PowerBI software	Res Res1	Project 7	1 week - 4 weeks
Structured Query Language(SQL)	-To extract and analyze data stored in databases. Dbeaver for SQL to write your SQL query online	Res	Project 8	1 - 4 weeks
Machine Learning 1 (Using Statistical/Traditional approach) ● Supervised Classification. ● Supervised Regression.	-To teach you the end-to-end process of investigating data through a machine learning lens. - To teach you a few of the most important ML Algorithms and how to evaluate the performance of your models.	Res 1 Res 2	Project 9	3 - 5 months
Machine Learning 2 (Using Deep Learning approach) ● Supervised_ Tensorflow Track	-Learn how to build image classifiers and deep learning applications with Tensorflow. -Use your own Tensorflow models in the real world on devices, in the cloud, and on browsers. -Curate all the skills necessary to start creating your own AI applications.	Res 3	Project 10	1 - 3months
Machine Learning 3 ● Semi-supervised		Res		15mins
Machine Learning 4 ● Unsupervised_ Clustering.	-To teach you how you can use Unsupervised Learning approaches– including randomized optimization, clustering, and feature selection and transformation to find structure in unlabeled	Res 4	Project 12	2 weeks - 1 month

	data.			

SECTION TWO

Section 2 is not so compulsory but will make you stand out from a regular Data scientist/Machine learning Engineer. This is one of the things people whose Research papers you read at Top conferences do beyond Section 1.

The resources below give even deeper insights into most of the Algorithms you've used in your Projects, we highly recommend you follow through.

Supervised Learning	1. SVM 2. Naive Bayes 3. Logistic Regression 4. Regression Trees 5. Decision Trees 6. RandomForest	1. Res1, Res2, Res3 2. Res 3. Res 4. Res 5. Res1, Res2 6. Res	1 month
Unsupervised	K-Means Explained	Res1, Res2	2 hours
Thorough insights into how **CNN work from a Theoretical and Hands-on** Approach using	Highly HIghly RECOMMENDED	Res	3 weeks - 1 month

Optional Further Learning.

Here is an in-depth and practical machine learning course, to give you a holistic understanding of ML, covering theories, applications, and inner workings of supervised, unsupervised, and deep learning algorithms.	Res

Made with love by Precious Kolawole and Oluwayetty

Join our Telegram Group