Blockchain Foundations

Topic Name : BLOCKCHAIN

Sub-topic Name : BLOCKCHAIN MASTERS

Course link : https://ineuron.ai/course/Blockchain-Foundations

Course Description :-

Presenting the blockchain community session where students will learn the fundamentals of Blockchain Technology along with Solidity programming fundamentals with hands-on practical problems. Learners will learn to build their own cryptocurrency after completion of this community session

Course Features :-

=> Course material

=> Course resources

=> On demand recorded videos

=> Practical exercises

=> Quizzes

=> Assignments

=> Course completion certificate

What you will learn :-

=> Introduction to blockchain

=> Ethereum and Solidity

=> Solidity

=> Create your Crytocurrency Project

Requirements :-

=> System with Internet Connection

=> Interest to learn

=> Dedication

Instructors :-

=> Sanjeevan Thorat :

~ Data Scientist and Blockchain developer, with experience in developing and managing end to end solutions. I have hands-on experience in Python Programming Language, Machine Learning Deep Learning and Natural language processing. Blockchain development experience in smart contracts, Decentralised Finance applications, DAOs, NFTs and Oracles running on Ethereum and Polygon blockchains. I have worked with various clients for different industry projects in the blockchain space. I specialize in building smart contracts on the Ethereum blockchain along with JavaScript integration for enhancing user experience to generate maximum returns on investment.

Curriculum details :-

=> Introduction to blockchain :

~ What is Blockchain
~ History of Blockchain
~ Bitcoin Blockchain in depth

=> Ethereum and Solidity :

~ History Ethereum Blockchain
~ Ethereum Blockchain in depth
~ Creating a blockchain from scratch in Javascript

=> Solidity :

~ What is Solidity
~ Solidity basics
~ Smart contract fundamentals
~ Payable functions
~ Fallback functions
~ View functions
~ Pure functions
~ Function overloading
~ Function overriding
~ Solidity Events
~ Block and Transaction details
~ Solidity Inheritance
~ Single Inheritance
~ Multiple Inheritance
~ Heirarchical Inheritance
~ Multilevel Inheritance
~ Abstract Contracts
~ Solidity Interfaces
~ Solidity Libraries

=> Project :

~ Creating a cryptocurrency with ICO in Solidity from scratch

Advanced Python

Topic Name : DATA SCIENCE

Sub-topic Name : PYTHON

Course link : https://ineuron.ai/course/Advanced-Python

Course Description :-

The purpose of this course is to teach students about Python's advanced modules. Using various assigned challenges, we'll go through several advanced python modules in order to create real-time apps. The information in this course should be understood by anybody with a basic familiarity of the Python programming language. Students will receive hands-on practical experience in producing industrial projects after successfully completing the course. You might begin applying for freelancing employment in order to make a fortune.

Course Features :-

=> Online Instructor-led learning

=> Practical Implementation

=> Integrate academic knowledge with the tech

=> Real-time Project

=> Live Class Recording

=> Doubt Clearing

=> Assignment in all the Module

=> Quiz in every Module

=> Career Counselling

=> Completion Certificate

What you will learn :-

=> Python Flow control

=> List

=> Tuple

=> sets

=> Dictionary

=> Python Functions

=> Python Programs

Requirements :-

=> System with Internet Connection

=> Interest to learn

=> Dedication

Instructors :-

=> Shubham Sharma :

~ Having 3+ years of DataScience and Web Development expertise, proficient in data modelling, data preprocessing as well as scripting languages Python and PHP. I've also worked as a mentor and a freelancer. Machine Learning and Natural Language Processing (NLP) are two of my areas of expertise.

Curriculum details :-

=> Introduction to the course :

~ Course Introduction
~ Who is this course for?
~ Course Overview & Course outcome
~ Course Pre-requisite

=> Python Flow Control :

~ What are control statements?
~ Explanation of If-else
~ Explanation of for loop
~ Explanation of While Loop
~ What is Break & Continue Pass
~ Practical: Guess the Number
~ Practical: Write a program to print a Right-Angle Triangle?
~ Practical: Check the Leap Year
~ Practical: Write a Program to Print Pyramid, Left /right triangle/ diamond?

=> Assignment 1: :

~ How to convert one unit to another?

=> Python Data Structure - List :

~ What is a List?
~ Creating a List
~ Accessing The List Elements
~ Adding New Data in the List
~ The Slice Operator With List
~ Modifying a List
~ Deletion in a List
~ Appending Items In a List
~ Multiplying a List
~ Membership Operators On List
~ Built In Functions For List
~ Methods Of List
~ Practical: Python program to interchange first and last elements in a list.
~ Practical: Count occurrences of an element in a list

=> Assignment 2: :

~ Multiply all numbers in the list

=> Python Data Structure-Tuple :

~ What is a Tuple?
~ Difference between list and tuple.
~ Benefits Of Tuple
~ Creating Tuple
~ Packing/Unpacking a Tuple
~ Accessing a Tuple
~ Changing the Tuple
~ Deleting the Tuple
~ Functions used with Tuple
~ Methods used with Tuple
~ Operations allowed on Tuple
~ Practical: Create a list of tuples from a given list having a number and its cube in each tuple.

=> Assignment 3: :

~ Sum of tuple elements

=> Python Sets :

~ What are Sets?
~ Practical: Iterate over a set in Python

=> Assignment 4: :

~ Find lost element from a duplicated array using Set difference

=> Python Dictionary :

~ What Is a Dictionary ?
~ What Is a Key-Value Pair ?
~ Creating a Dictionary
~ Important Characteristics of a Dictionary
~ Different ways to access a Dictionary
~ Updating elements In Dictionary
~ Removing elements from Dictionary
~ Functions used In Dictionary
~ Dictionary Methods
~ Removing elements from Dictionary
~ Functions used In Dictionary
~ Practical: Python program to find the sum of all items in a dictionary

=> Assignment 5: :

~ Extract Keys Value, if Key Present in List and Dictionary

=> Python Functions :

~ Global & Local Variables
~ Function Argument
~ Function Recursion
~ Lambda Function
~ The map( ) Function
~ The filter( ) Function
~ Using map( ) and filter( ) with Lambda Expressions
~ Practical: Creating a calculator

=> Assignment 6: :

~ Create a scientific calculator

=> Projects :

~ Create a currency convertor using python.
~ Create an alarm clock.
~ Create a mail sending program.

=> Final Task :

~ Build an app that will track the number of calories that you eat every day.

Azure Databricks

Topic Name : CLOUD

Sub-topic Name : AZURE

Course link : https://ineuron.ai/course/Azure-Databricks

Course Description :-

Building a solution architecture for a data engineering solution using Azure Databricks, Azure Data Lake Gen2, Azure Data Factory and Power BI, creating and using Azure Databricks service and the architecture of Databricks within Azure, creating, configuring and monitoring Databricks clusters, cluster pools and jobs, passing parameters between notebooks as well as creating notebook workflows.

Course Features :-

=> Self-paced Recording

=> Assignment in all modules

=> Quiz in every module

=> Completion Certificate

What you will learn :-

=> learn how to build a real world data project using Azure Databricks

=> learn how to create notebooks, dashboards, clusters, cluster pools and jobs in Azure Databricks

=> learn how to create Azure Data Factory triggers to schedule pipelines as well as monitor them.

Requirements :-

=> A system with internet connection

=> Your dedication

=> Interest to learn

Instructors :-

=> MD Imran :

~ Working as Data Scientist with experience in solving real world business problems across different domains.

Curriculum details :-

=> Azure Databricks :

~ Spark Basics Preview
~ Why spark is difficult
~ Why databricks in cloud?
~ How to save databricks demo cost
~ demo overview Preview
~ Demo provision databricks, clusters and workbook
~ demo mount data lake to databricks DBFS
~ Demo Explore, Analyze, Clean, Transform and load data in databricks
~ azure databricks cluster
~ azure databricks other important components
~ databricks monitoring

Apache Atlas

Topic Name : BIG DATA

Sub-topic Name : TECH STACK

Course link : https://ineuron.ai/course/Apache-Atlas

Course Description :-

Apache Atlas provides open metadata management and governance capabilities for organizations to build a catalog of their data assets, classify and govern these assets and provide collaboration capabilities around these data assets for data scientists, analysts, and the data governance team.

Course Features :-

=> Course material

=> Course resources

=> On demand recorded videos

=> Practical exercises

=> Quizzes

=> Assignments

=> Course completion certificate

What you will learn :-

=> Introduces Apache Atlas

=> Apache Atlas Installation

=> Walkthrough of Apache Atlas Console

=> Terminologies in Apache Atlas

=> Data Lineage in Apache Atlas

=> Classification in Apache Atlas

=> Basic and Advanced Search

=> Glossary in Apache Atlas

=> REST APIs in Apache Atlas

=> Practical use of REST APIs

=> Apache Atlas Internals

=> Apache Atlas at ING

Requirements :-

=> System with Internet Connection

=> Interest to learn

=> Dedication

Instructors :-

=> Shruti Mantri :

~ Shruti Mantri is a well-known software architect, instructor and mentor in the industry. She has 10+ years of experience in the software industry, and has worked with different organizations like Oracle, Flipkart, Amazon, Myntra and Twitter. She is known for her expertise in the data engineering field, and has a sound knowledge on the latest technologies in this domain. She has helped develop data platform at organizations, and guided several mentees in understanding data engineering and how to get better at it.

Curriculum details :-

=> Introduction :

~ Introduction
~ Course Objectives

=> Installation :

~ Atlas Installation
~ Loading Sample Data

=> Terminologies :

~ Types and Entities
~ Relationships
~ Attributes
~ System specific types
~ Data lineage
~ Classification
~ Classification propagation

=> Atlas UI :

~ Basic Search in Atlas UI
~ Advanced search in Atlas UI
~ Glossary

=> REST APIs :

~ REST APIs in Atlas
~ Precap to Hands-on
~ Creating Entity Type Definitions
~ Creating Relationship Type Definitions
~ Creating Entities
~ Creating Relationships
~ Creating Data Lineage
~ Creating Classification

=> Internals :

~ Apache Atlas Internals

=> Use-cases :

~ Industry Use-case: Apache Atlas at ING