Certification on Deep Learning

Syllabus

Duration: 60 Hours

1. Introduction

- **Why Python Programming**
- **Course Overview**
- **Data Types and Operators**
- **Arithmetic Operators**
- **Variables and Assignment Operators**
- **Integers and Floats**
- **Booleans, Comparison Operators, and Logical Operators**
- **Strings**
- **Type and Type Conversion**
- **Lists and Membership Operators**
- **List Methods, Tuples, Sets**
- **Dictionaries and Identity Operators**
- **Compound Data Structure**
- **Discussion and Doubt Clear**
- **Assignment and Test**

2. Control Flow

- **Conditional statements**
- **Iteration/looping statements**
- **Break, Continue**
- **Zip and Enumerate**
- **Discussion and Doubt Clear**
- **Assignment and Test**

3. Scripting

- **Python Installation**
- **Scripting with Raw Input**
- **Errors and Exceptions**
- **Reading and Writing Files, Importing Local Scripts**
- **The Standard Library, Techniques for Importing Modules**
- **Discussion and Doubt Clear with Assignment and Test**

4. Neural Networks

- **Introduction to Neural Networks**
- **Implementing Gradient Descent**
- **Training Neural Networks**

- Sentiment Analysis
- Deep Learning WIth Pytorch

5. Convolutional Neural Network

- Cloud Computing
- Convolutional Neural Network
- CNNs In PyTorch
- Autoencoders
- Discussion and Doubt Clear
- Assignment and Test

6. Recurrent Neural Network

- Recurrent Neural Networks
- Long Short-Term Memory Network
- Implementation of RNN & LSTM
- Hyperparameters
- Embeddings & Word2vec
- Sentiment Prediction RNN
- Generative Adversarial Network
- Deep Convolutional GANs, PIX2PIX & Cyclegan
- How to Deploy a Models
- Discussion and Doubt Clear
- Assignment and Test

7. Project Work

8. Placement Assistance Sessions

- Mock Interviews
- GDs
- Preplacement Talks
- Industry Exposer Sessions

9. Internship

*In Assignment there is Mini Projects.