Deep Learning Explained

Modality: Self-Paced Learning

Duration: 24 Hours

SATV Value:

CLC:

NATU:

SUBSCRIPTION: Learn, Master

About this course:

Machine learning utilizes PCs to run prescient models that understand from existing information to conjecture future practices, results, and patterns. Profound learning is a machine learning's sub-field, where models inspired by the way our brain functions are communicated numerically, and the scientific models define parameters, which can be in the request for 1000 to 100+ million, are found out automatically from the information.

Deep learning is a key to AI-powered advancements being created over the globe. In this course of deep learning, you will gain proficiency with an intuitive way to deal with building complex models that assist machines with solving genuine issues with human-like intelligence. The methodologies of intuitive will be converted into working code with pragmatic issues and hands-on understanding. You will figure out how to create and get insights from these models using Python Jupyter notebooks running on your Linux machine or Windows, or on a virtual machine running on Azure. Then again, you can use the platform of MS Azure Notebooks for free.

The normal compensation for a Data Scientist is $129,219 annually.

Course Objective:

- The segments of a deep neural system and how they cooperate
- The fundamental sorts of deep neural systems (CNN, MLP, LSTM, RNN) and the kind of information each is intended for.
- Working information on concepts, vocabulary, and algorithms used in deep learning
- How to build a start to finish model for recognizing written by hand digit pictures, using an MLP (Multi-Layered Perceptron) and multi-class Logistic Regression.
- How to build an RNN (Recurrent Neural Network) model to estimate time-series information.
- How to build a CNN (Convolution Neural Network) model for improved digit acknowledgment.
- How to build an LSTM (Long Short Term Memory) model to process successive content information.

Audience:

- Engineers
- Technology Managers

- Data Scientist

Prerequisite:

Working knowledge of data science

Basic programming skills

Suggested prerequisite course:

Introduction to Python for Data Science

Data Science Essentials

Course Outline:

1 | Introduction and Overview

- Introduction and Overview
- What is Deep Learning
- Environment Setup

2 | Multi-class Classification using Logistic Regression

- Lectures
- Knowledge Checks
- Tutorials

3 | Multi-Layer Perceptron

- Lectures
- Knowledge Checks
- Tutorials

4 | Convolution Neural Network

- Lectures
- Knowledge Checks
- Tutorials

5 | Recurrent Neural Network and Long Short Term Memory

- Lectures
- Knowledge Checks
- Tutorials

6 | Text Classification with RNN and LSTM

- Lectures
- Knowledge Checks
- Tutorials