Beginning Application Development with TensorFlow and Keras

Duration: 2 Days Course Code: LO035411 Delivery Method: Virtual Learning

Overview:

This is a 2-day course packaged with the right balance of theory and hands-on activities that will help you easily learn TensorFlow and Keras from scratch.
This course will provide you with a blueprint of how to build an application that generates predictions using a deep learning model. From there you can continue to improve the example model—either by adding more data, computing more features, or changing its architecture—continuously increasing its prediction accuracy, or create a completely new model, changing the core components of the application as you see fit.

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Target Audience:

This course is designed for developers, analysts, and data scientists interested in developing applications using TensorFlow and Keras.

Objectives:

- A blueprint of the complete process for deploying a deep learning application: from environment setup to model deployment.
- A hands-on introduction to TensorFlow and Keras, popular technologies for building production-grade deep learning models.
- An example web-application that uses an HTTP API interface to retrieve model predictions.

Prerequisites:

Hardware:

For successful completion of this course, students will require computer systems with the following:

- Processor: 2.6 GHz or higher, preferably multi-core
- Memory: 4 GB RAM
- Hard disk: 10 GB
- Projector
- Internet connection

Software:

- Operating System: Windows (8 or higher).
- Visual Studio Code: https://code.visualstudio.com/ .
- Python 3: Follow instructions in website: https://www.python.org/downloads/
- TensorFlow 1.4 or higher on Windows: Follow instructions in website: https://www.tensorflow.org/install/install_windows .
- Keras 2: Follow instructions in website (Keras only): https://keras.io/#installation .

Content:

Lesson 1: Introduction to Neural Networks and Deep Learning

- What are Neural Networks?
- Configuring a Deep Learning Environment

Lesson 2: Model Architecture

- Choosing the Right Model Architecture
- Using Keras as a TensorFlow Interface

Lesson 3: Model Evaluation and Evaluation

- Model Evaluation
- Hyperparameter Optimization

Lesson 4: Productization

- Handling New Data
- Deploying a Model as a Web Application

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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