
OpenCV
scikit
learn
TensorFlow
K
Keras

ONLINE

ADVANCED PYTHON 5 DAYS WORKSHOP

INTORDUCTION TO THE COURSE | PYTHON BASICS

SPEAKER

Thakshila Thilakanayake

BSc. Engineering Hons, MPhil (Reading)

Introduction to the Course

- The course is specially designed for the beginner and intermediator level employees, undergraduates, students and developers interested in learning and practicing Python for ML,DL,IP and DS.
- This course covers the fundamentals of ML,DL,IP and DS to the advanced concepts with practical applications where ever necessary
- The practical sessions will be based on the applications which use Python Programming Language, Scikit-Learn, TensorFlow, Keras and OpenCV software platforms.
- The course contains 5 Live Lectures, 5 Practical Sessions and 1 Pre-recorded Lecture Session.
- All the Live Lectures, study materials, codes and assignments will be available in www.edxcope.com

Method of Conduct

Per day, there will be a 3 hour Online Live Lecture, 1-2 hour Practical

1. Online Live Lecture (3 hours/Day) – Weekdays 6:00PM-9:00PM
    - interactive session, where you can directly ask questions, clarify doubts and discuss
2. Practical Session (1-2 hours/Day) – Pre-recorded Video after the lecture
    - Materials will be available in GitHub and the link will be provided in due course
    - Video will be uploaded to edxcope.com
3. Extra Day – DAY 06
    - Pre recorded Lecture series Python Web Development with Flask and, ML DL model deployment

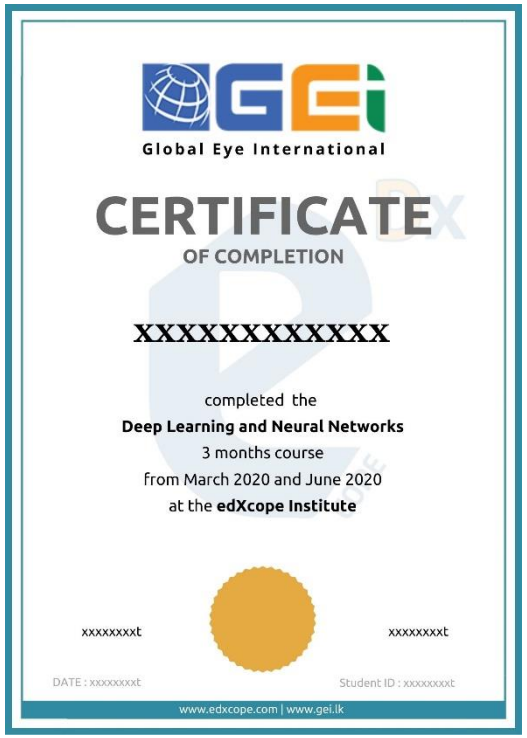
DAY	Lecture	Practical
DAY 01 - 16th Nov, Monday Introduction to Python and Python Programming Basics	Part 1 - Setting Up the Environment Configuration Part 2 - Python Programming Essentials and Python Modules I Part 3 - Python Functions	Python Programming Basics
DAY 02 - 17th Nov, Tuesday Data Processing and Visualization using Numpy, Scipy and Matplotlib	Part 1 - Python Modules Part 2 - Numpy Part 3 - Matplotlib Part 4- Introduction and Basic Usage of Pandas	Python External Modules
DAY 03 - 18th Nov, Tuesday Image Processing with OpenCV	Part 1 - Low Level Image Processing with OpenCV Project 01 - Object Detection using Pure Image Processing and Color Segmentation Project 02 - Sinhala Character Recognition PC Application	Object Detection using OpenCV
DAY 04 - 19th Nov, Tuesday Machine Learning with Scikit Learn	Part 1 - Introduction to Machine Learning, Supervised Machine Learning Part 2 - Introduction to K Nearest Neighbor Classifier	Handwritten digits Recogniton Web App using Flask with Neural Ntworks
DAY 05 - 20th Nov, Tuesday Deep Learning with Keras, Tensorflow and Scikit Learn	Part 1 - Introduction to Neural Networks types Part 2 - Feed Forward Neural Networks Architecture and Forward Propagation Part 3 - Introduction to Tensorflow and Keras APIs	Fake data generation using GANs
Extra Tutorial Web Framework development with Flask	Part 01 - Introduction to Python Web-frameworks Part 02 - Introduction to Python Backend development with Flask Part 03 - Introduction to the deployment of ML,DL model in Python backends	Deployment of Python Backends with Heroku and Pythonanywhere

Certificate

All the participants are eligible to obtain a participating certificate upon the successful completion of the course.

The certificate is offered through EdXcope by Global Eye International (Pvt) Ltd.

GEI is a Registered Private Limited Company in Sri Lanka providing Consultation, Training and Knowledge Partner in International Certification



Payments

All the payments should be done through the verified and secured online payment gateway integrated in www.edxcope.com

Payment

1. The total course fee is 3,000LKR (All Inclusive)
2. The total course fee should be paid on the 2nd day of the course.
3. Participant can request for an extension of deadline through the Lecturer

Resource Personnel

Thakshila Thilakanayake

B.Sc. Engineering (Hons), MPhil (Reading)

A passionate educator, trainer and developer in the fields of Robotics, Data Science, Machine Learning and Deep Learning with several years of demonstrated experience, who guides the community with the latest research findings and technologies in the subjective fields. Currently conducting workshop, courses and cooperate training sessions in several institutes.



Press the icons to navigate

Tools

- Programming Language: Python
- Modules used: Scikit Learn, Tensorflow, Keras, OpenCV, Numpy, Matplotlib
- Development Environment: Anaconda Navigator (Jupyter Notebook)

TensorFlow

References

1. *an Goodfellow and Yoshua Bengio and Aaron Courville*, Deep Learning, 2016, MIT Press.
2. *François Chollet*, Deep Learning with Python, 2017, Manning Publications Co.
3. Oliver Theobald, Machine Learning for Absolute Beginners (2nd Edition), 2018
4. Jake VanderPlas, Python Data Science Handbook: Essential Tools for Working with Data, 2016, O'Reilly Media, Inc.

Let’s Get Started

With Advanced Python