The Institution of Engineers, Malaysia

ORGANISED BY INFORMATION AND COMMUNICATIONS TECHNOLOGY SPECIAL INTEREST GROUP (ICTSIG)

ONLINE DIGITAL CLASS

INTRODUCTION TO MACHINE LEARNING WITH PYTHON PROGRAMMING FOR ENGINEERS - PART 4

by Ir. Dr Daniel Pu Chuan Hsian

JOIN NOW!!

- Saturday, 06 April 2024
- Digital Platform (ZOOM)
- Member & Non Member : RM 30 (SST Inclusive)
- CPD hours :2 Hours
- CPD Ref Number : IEM24/HQ/002/T (w)

Contact Us
03-78900133

REGISTER ONLINE AT : www.iem.org.my

SYNOPSIS

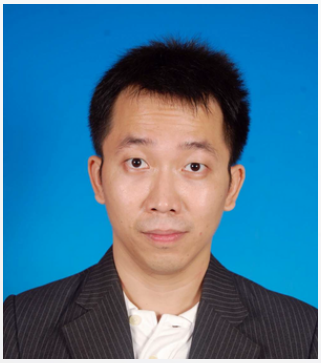
Python programming has been widely used for machine learning (ML) developments. Python programming provides a vast set of third-party packages for ML which have been developed by engineers and scientists over the years. The reasons that Python became widely used and popular programming in ML are due to its clean and readable syntax with a rich variety of libraries and frameworks which provide pre-built functions and tools, such as TensorFlow, Scikit-Learn and Keras.

In addition, Python programming is a cross-platform programming language, which can be developed for various operating systems (OS) such as Windows or Ubuntu OS without modifications from which it is the desired feature for deploying ML applications across different operating platforms for different applications. The aim of the digital class is to provide introductory level course for engineers who have little or no knowledge on Python programming and they would like to get themselves familiarize with the powerful tools in ML applications. The digital class consists of four sessions with topics given the the following class content section, which would be conducted online on the pre-scheduled dates.

CONTENTS

1.	Introduction to fundamental of machine learning and basic Python programming on variables, strings, arithmetic, relational, logical and membership operators.
2.	Introduction to built-in data structures, flow of control, user-defined function and Iterator.
3.	Introduction to supervised learning and learners can get to design their first ML model on Iris flower classification using widely available fisher iris dataset.
4.	Introduction to decision tree, model evaluation and selection using fisher Iris dataset.
5	Introduction to unsupervised learning and k-means clustering algorithm. Learners will develop k-means clustering algorithm using Python programming language.

ABOUT THE SPEAKER



Ir. Dr Daniel Pu Chuan Hsian has more than 20 years of working experience in software development in the IT company and teaching experience of electronic and programming subjects at colleges & universities' levels. Currently, he serves as an academic staff in the Department of Electrical and Electronic Engineering of the University of Nottingham Malaysia. With his vast experience in the software development and teaching of programming languages, he has been invited by the IEM and universities to conduct programming & coding workshops and digital classes for engineers and students.