

Technical Workshop on Machine Learning for IoT Data

As the world becomes increasingly digital, everything from coffee machines to cars can quickly become part of IoT network.

The IoT will continue to deliver new opportunities for digital business innovation for the next decade.

This technical course aims at elaborating the intelligence gathered by the sensing data through IoT sensors and platforms – with a focus on different applicable and useful machine learning models to build smarter applications.

Programme code	TBC
Duration and time	2 days 9:30-17:00
Venue	1/F, HKPC Building, 78 Tat Chee Avenue, Kowloon Tong
Medium	Cantonese, supplemented with English terminology
Course fee	HK\$4,800 (May apply up to HK\$3,200* subsidy)
Prerequisite	It is highly recommended that participants possess basic programming knowledge (Python)

Trainer Information

Simon MOK is an IT professional trainer for over 10 years covering IoT, data analytics, AI and machine learning and programming. He has rich experience in leading development team to deliver software solutions for clients. He is a M.Phil from the University of Hong Kong and MSc in Computer Science from the Chinese University of Hong Kong.

RTTP Training Grant Application

Companies should submit their RTTP training grant application for their employee(s) via <https://rttp.vtc.edu.hk/rttp/login> at least two weeks before course commencement. Alternatively, [application form](#) could be submitted by email to rttp@vtc.edu.hk along with supporting documents.

(Day 1)

Introduction

- Growth of IoT
- Smart Data

Computing Framework

- Fog Computing
- Edge Computing
- Cloud Computing
- Distributed Computing

Use Case

- Smart Energy
- Smart Mobility
- Smart Citizen
- Urban Planning
- Smart City Data Characteristics

Classification

- K-nearest Neighbors
- Naive Bayes
- Support Vector Machine

Regression

- Linear Regression
- Support Vector Regression

(Day 2)

Combining Models

- Classification and Regression Trees
- Random Forests
- Bagging

Clustering

- K-means
- Density-based Spatial Clustering

Feature Extraction

- Principal Component Analysis
- Canonical Correlation Analysis
- Neural Network

Time Series and Sequential Data

Anomaly Detection

- One-class Support Vector Machine

Future Trends

- IoT Data Characteristics
- IoT Applications
- IoT Data Analytics Algorithms

Enrolment Methods

1. Scan the QR code to complete the enrolment and payment online OR
2. Mail the crossed cheque with payee name “Hong Kong Productivity Council” (in HK dollar) to HKPC Academy, Hong Kong Productivity Council, 3/F, HKPC Building, 78 Tat Chee Avenue, Kowloon (attention to Mr Desmond CHAN). Please indicate the course name and course code on the envelope.



[Enrolment Link](#)

Supporting Organisations (In arbitrary order)

