### ITAI03: Fundamentals of Machine Learning

Description:

A practical training workshop on the concepts, theories, and implementations of machine learning techniques and tools for applying to real-world problems

Instructor



Training Date: 14 มิ.ย. 2565 - 17 มิ.ย. 2565

fee: 8800 ฿ (ราคายังไม่รวม Vat 7%)

Days & Duration : 4 Day(s) | 24 Hour(s)

Time: 09:00:00 - 16:00:00

Language: Thai

Venue : ห้องอบรม ชั้น 3 อาคารซอฟต์แวร์พาร์ค

Type: Classroom

Category: AI & Data Technology

## Mr. Tapanan Yeophantong

Objectives:

A practical training workshop on the concepts, theories, and implementations of machine learning techniques and tools for applying to real-world problems. Topics include an introduction to data science and machine learning, traditional machine learning techniques, statistical pattern recognition approaches in machine learning, and artificial neural networks, with an overview of deep learning techniques.

PREREQUISITE: Basic Python or programming skills, and Basic mathematics + statistics (if any)

#### Benefits:

Course Outline:

Lesson 1 Data Science & Machine Learning (6 hours)

1.1. Types & anatomy of data
1.2. Exploring data
1.3. Data filtering & transformation
1.4. Dimensionality reduction
Lesson 2 Traditional Machine Learning Techniques (6 hours)
2.1. Concept learning & inductive learning hypothesis
2.2. Decision tree learning
2.3. Bayesian learning
2.4. Nearest-neighbours algorithms
Lesson 3 Statistical Pattern Recognition (6 hours)
3.1. Radial basis functions & kernel-based approaches
3.2. Support vector machines
3.3. Cluster analysis & unsupervised learning
3.4. Linear models & regression problems
Lesson 4 Artificial Neural Networks (6 hours)
4.1. Perceptrons
4.2. Stochastic gradient descent algorithm
4.3. Backpropagation & multi-layered networks
4.4. Deep learning architectures & applications

## Payment Condition:

Payment can be made by:

- 1. Cash or Credit Card or Bank Cheque payable to สำนักงานพัฒนาวิทยาศาสตร์และเทคโนโลยีแห่งชาติ or National Science and Technology Development Agency (a post-dated cheque is not accepted) on the first day of the service or within the last day of the service.
- 2. Account transfer and send the proof of the payment (the deposit slip) via email tes@swpark.or.th
  - ธนาคารกรุงเทพ สาขาอุทยานวิทยาศาสตร์ Saving Account Number: 080-0-00001-0

Account Name: สำนักงานพัฒนาวิทยาศาสตร์และเทคโนโลยีแห่งชาติ



# o **ธนาคารกรุงไทย** สาขาตลาดไท

Saving Account Number: 152-1-32668-1

Account Name: สำนักงานพัฒนาวิทยาศาสตร์และเทคโนโลยีแห่งชาติ

#### Notes:

- Withholding tax (3%) is exempt.
- Should you need to withdraw, you must send the notice of the withdrawal in writing no later than 7 working days before the commencement date. The cancellation less than 7 days will be subject to a fine of 40% of the fee.
- Software Park Thailand reserves the rights to cancel courses due to unforeseen circumstances.

## Contact Person:

For more information, contact our course coordinator on:

Tel: +66-2583-9992 Ext. 81442-81443 Email: tes@swpark.or.th

You are encouraged to use the course schedule as a guide to plan your training. The schedule is accessible at <a href="https://www.swpark.or.th">www.swpark.or.th</a> for more information.