ITAI02 : Math and Statistics for Machine Learning

Description :

ปูพื้นฐานคณิตศาสตร์และสถิติ สำหรับ Machine Learning

Instructor :

Training Date : **11 พ.ค. 2565 - 12 พ.ค. 2565**

fee : **4500 ฿** (ราคายังไม่รวม Vat 7%)

Days & Duration : **2 Day(s) | 12 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
Assistant Dean for External Affairs

Objectives :
A training workshop on the mathematical fundamentals required for understanding data science and machine learning techniques. Designed for individuals intending to pursue knowledge in the fields, topics include basic probability theory, understanding expectations and random processes, cluster analysis and linear modelling using standard tools in statistics.

Target Group :

บุคคลทั่วไปที่สนใจด้าน AI

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

Benefits :

Course Outline :
Lesson 1 Basic Probability Theory
   1.1. Probabilities & Probability Spaces
   1.2. Conditional Probabilities & Bayes Theorem
   1.3. Random Variables & Probability Distributions
   1.4. Multivariate & Joint Probability Distributions
Lesson 2 Expectations & Random Processes
   2.1. Means, Variances & Covariances
   2.2. Understanding Random Processes & Convergence
   2.3. Confidence Intervals
   2.4. Hypothesis Testing
Lesson 3 Cluster Analysis
   3.1. Overview of Cluster Analysis
   3.2. Simple Hierarchical Clustering
   3.3. K-Means
   3.4. Evaluating Clusters: Impurity & Silhouette Scores
Lesson 4 Linear Models
   4.1. Overview of Regression Models
   4.2. Parametric & Non-parametric Estimation
   4.3. Ordinary Least Square (OLS) Estimation
   4.4. Evaluating Regression Models: MSE & R2

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 ttd@swpark.or.th

   ○ **ธนาคารกรุงเทพ** สาขาอุทยานวิทยาศาสตร์
     Saving Account Number: **080-0-00001-0**
     Account Name: **สำนักงานพัฒนาวิทยาศาสตร์และเทคโนโลยีแห่งชาติ**

○ **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 www.swpark.or.th for more information.