ITAI04 : Computer Vision and Deep Learning

Description :
A practical training workshop on the principles and practices in developing computer vision applications, using open cv frameworks and machine/deep learning tools. Topics include an overview for computer vision tasks and pipelines, computer vision frameworks and tools, object detection and localisation, object recognition, and motion analysis techniques for tracking objects in video streams.

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](#)
Assistant Dean for External Affairs

Objectives :
A practical training workshop on the principles and practices in developing computer vision applications, using open cv frameworks and machine/deep learning tools. Topics include an overview for computer vision tasks and pipelines, computer vision frameworks and tools, object detection and localisation, object recognition, and motion analysis techniques for tracking objects in video streams.

Target Group :
PREREQUISITE : Pass "Fundamental of Machine Learning" course or Have basic knowledge in Machine Learning

Benefits :

Course Outline :
Lesson 1 Basics of Computer Vision (6 hours)
    1.1. Computer vision tasks & pipelines
    1.2. Overview of OpenCV framework & libraries
    1.3. Image preprocessing & feature extraction
    1.4. Performance evaluation
Lesson 2 Object Detection & Localisation (6 hours)
    2.1. Overview of object detection & localisation problems
    2.2. Object detection using cascade classifiers
    2.3. Understanding sliding window algorithm
    2.4. Object detection using YOLO
Lesson 3 Object Recognition (6 hours)
    3.1. Overview of object recognition
    3.2. Object recognition using ML techniques
    3.3. Importance of feature extraction
    3.4. Object recognition using deep learning: A FaceNet example
Lesson 4 Object Tracking & Motion Analysis (6 hours)
    4.1. Overview of object tracking & motion estimation
    4.2. Object tracking using Kalman filter
    4.3. Understanding object association
    4.4. Analysing motion through object detection & tracking

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**

○ **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. 81420 - 81425

Email: ttd@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.