ITAI05: Principles & Practices of Computer Vision

Description:

A training workshop on the design and implementation of computer vision applications for object detection and recognition, using modern deep learning tools and technologies

Instructor



Training Date: 12 ก.ค. 2565 - 15 ก.ค. 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 training workshop on the design and implementation of computer vision applications for object detection and recognition, using modern deep learning tools and technologies. Topics include an introduction to object detection and recognition, using R-CNN and the inception models, SSD and MobileNet, and approaches for training deep learning models for object classification.

Pre-requisite(s): Computer Vision & Deep Learning (or equivalent)

Benefits:

Course Outline:

Lesson Plan

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Lesson 1 Introduction to Object Detection & Recognition (6 hours)

1.1. Overview of object detection tasks & pipelines

1.2. Object detection using YOLO

1.3. Overview of object recognition

1.4. Example: Face recognition using FaceNet
Lesson 2 R-CNN & the Inception Models (6 hours)

2.1. Understanding R-CNN family of algorithms

2.2. Object detection using R-CNN & pre-trained models

2.3. Understanding Inception models

2.4. Training an Inception model for object recognition
Lesson 3 SSD Architecture & MobileNet Models (6 hours)

3.1. Overview of SSD architecture

3.2. Object detection using SSD: OpenCV's Caffe Model example

3.3. Understanding MobileNet models

3.4. Training MobileNet for object recognition
Lesson 4 Object Classification (6 hours)

4.1. Overview of object classification problems

4.2. Importance of feature extraction: feature embeddings

4.3. Training a deep learning model for feature extraction

4.4. Pipelining object detection & classification for real-world applications

Payment Condition:

Payment can be made by:

1. Cash or Credit Card or Bank Cheque payable to สำนักงานพัฒนาวิทยาศาสตร์และเทคโนโลยีแหงชาติ 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 www.swpark.or.th for more information.