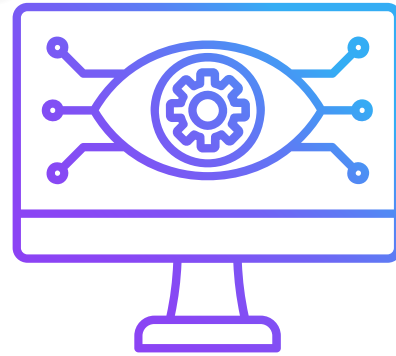


# Introduction to Image Processing and Computer Vision with Python



## About us

### Who we are

The Centre for Continuing and Professional Education (CPE) was established in 1999 to provide continuing professional education and lifelong learning opportunities for University's staff, students, alumni and the public. As part of TAR UMT's commitment to continuing education and lifelong learning, CPE is entrusted with designing, developing and delivering various activities, workshops and programmes to meet the diverse learning needs of multiple parties.

## About This Training

The Introduction to Image Processing and Computer Vision with Python module develops the concepts learned in Signal Processing and Information Theory and applies them to images and video. Image Processing and Computer Vision is the basis of all digital media technology and is an active area of research over a wide range of applications such as Compression and Medical Image Analysis. The programme features an introduction to digital image/video processing algorithms that form the core of digital media technology. Besides that, the basic principles and tools to use to process image and video processing are introduced, specifically, image enhancement techniques that can be applied in scientific, consumer, industrial and artistic applications. Some important examples of image enhancement include the removal of degradations images suffer during acquisition and the compression and transmission of images and videos, for economical storage and efficient transmission. This course is delivered through a mixture of Socratic lectures and hands-on practical / demonstration.



### Date and Time

19, 20, 21 June 2023  
Monday - Wednesday  
9 AM to 5 PM



### Training Venue

TAR UMT  
Jalan Genting Kelang, Setapak  
53300 Kuala Lumpur



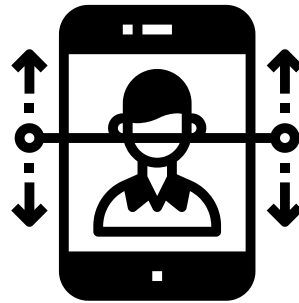
### Trainer

Assoc. Prof. Ts. Dr Tew Yiqi

# COURSE CONTENTS



Pre-Assessment



Interpolation and Decimation



Homomorphic Filtering

Introduction to Image and Video Processing

Image Enhancement

Pseudo Coloring

Sampling and Fourier Transforms

Histogram Processing

Video Enhancement

Filtering

Noise Smoothing

Case Studies and Demo

Image Sharpening

Post Assessment

## Introduce our Trainer

### Tew Yiqi

Assoc. Prof. Ts. Dr Tew Yiqi received his Bachelor Degree in Electronics Engineering (Hons) majoring in Computer from Multimedia University (MMU) in 2008. In 2011, he received his Master Degree in IT (Computer Science) from Universiti Kebangsaan Malaysia (UKM) and completed Doctor of Philosophy in Computer Science and IT in 2016 from University Malaya (UM).

Assoc. Prof. Ts. Dr Tew Yiqi has more than 12 years of experience as a system and firmware developer in image processing (satellite geographical data) and Internet of Things industry (wireless protocol and control design). He worked as a system development engineer in 2008 to develop a satellite image receiving system with graphical display user interface and as a senior firmware developer engineer in 2011 to build a radio frequency transmission protocol on Smart Home Automation system. Meanwhile, Assoc. Prof. Ts. Dr Tew Yiqi was a research officer at University Malaya in 2012 while pursuing his postgraduate studies in High Efficiency Video Coding (HEVC) and information hiding area. He has published more than 30 papers including Web of Science ISI Tier-1 papers and was admitted as Associate Editor for IEEE Transaction on Circuits and Systems for Video Technology.

Assoc. Prof. Ts. Dr Tew Yiqi served as an academic staff since 2016, supervised projects in Computer Science and ICT, particularly in image and video processing, embedded system and Internet of Things related areas. He is the lead researcher from the Centre of Computational Intelligence in TAR UMT to supervise Intelligent Classroom, Community Webcast Systems, Augmented Reality and Artificial Intelligence projects. Assoc. Prof. Ts. Dr Tew Yiqi received recognition and was appointed as a National Expert and Judge in the Internet of Things and Cloud Computing category from the Department of Skills Development, Ministry of Human Resource since 2018, to lead a national team in participating in the ASEAN and Asia level Skills Competitions.

Assoc. Prof. Ts. Dr Tew Yiqi actively participated in a number of industry and research projects. He received a TAR UMT internal grant in 2017, Fundamental Research Grant Scheme by the Ministry of Education in 2018 to conduct HEVC Multi-view Video Streaming Mechanism for Data Distribution Service Framework and an industrial grant from Kian Joo Can Factory with the project related to Industry 4.0 data channeling implementation. Throughout his achievement, he obtained his professional technologist recognition from Malaysia Board of Technologist, Associate Fellow of ASEAN Academy of Engineering & Technology, the Outstanding Researcher Award in TAR UMT in 2018 and 2020. Assoc. Prof. Ts. Dr Tew Yiqi is currently serving as a Programme Leader under Department of Information and Communication Technology in TARUMT.

## Contact Us



Centre for Continuing and Professional Education

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+601110758530 (whatsapp)

training@tarc.edu.my  
<https://www.tarc.edu.my/cpe/>

# Introduction to Image Processing and Computer Vision with Python

Venue: TAR UMT, Jalan Genting Kelang, Setapak, 53300 Kuala Lumpur

Date: 19-21 June 2023 (9.00 am - 5.00 pm)

## REGISTRATION FORM



CENTRE FOR CONTINUING & PROFESSIONAL EDUCATION

**Fees:**  Public  
RM 1749.00 per participant  
(inclusive of 6% Service Tax)

TAR UMT Student/Alumni  
RM 1399.20 per participant  
(inclusive of 6% Service Tax)

### The Manager

TARC Education Foundation (1033820M)

Tunku Abdul Rahman University of Management and Technology (TAR UMT)

TEL: 03-4145 0170

Email: training@tarc.edu.my

Dear Madam / Sir,

Please register the following participant(s) for the above programme: (To be completed in BLOCK LETTERS)

1

Name :

Email:

IC No. :

Mobile No. :

Nationality :

Designation :

2

Name :

Email:

IC No. :

Mobile No. :

Nationality :

Designation :

(If space is insufficient, please attach a separate list)

### Disclaimer

Registration is on a first-come-first-served basis. All cancellations must be made in writing. Cancellation made 14 days or more in advance of the workshop date will receive full refund. Cancellations made thereafter will be subjected to a cancellation fee of 50% of the workshop fee. All fees are payable in the event of non-attendance of any registered participant(s) or the overall attendance falls below 75% of total workshop hours. Replacement(s) can be accepted at no additional cost if notified 24 hours prior to the commencement of the workshop. The Tunku Abdul Rahman University of Management and Technology reserves the right to change the speaker, reschedule or cancel the workshop and all efforts will be taken to inform participants of the changes.

We hereby confirmed that (please tick accordingly):

We will be claiming under **HRD Corp Claimable Course** and full payment would be made to Tunku Abdul Rahman University of Management and Technology in the event that no disbursement from HRD Corp under any circumstances.

We will **NOT BE CLAIMING** from HRD Corp. Payment will be made to account payee TAR UMT by cheque or bank transfer to Public Bank Account No. 3 1 8 1 5 6 4 1 1 3. Kindly submit your payment remittance to training@tarc.edu.my together with this registration form.

## Submitted by

Name :

Email :

Company Name:

Company Address :

Designation :

Telephone No. :

Company Registration No. :

Company Stamp & Signature :

Department:

Mobile No. :

Date :