



राष्ट्रीयइलेक्ट्रॉनिकीएवंसूचनाप्रौद्योगिकीसंस्थान,कालीकट
National Institute of Electronics & Information Technology, Calicut



सत्यमेव जयते

Ministry of Electronics and
Information Technology
Government of India

Online Course Prospectus

ISO 9001-2015 Certified

Image Processing and Deep Learning

16th Oct – 20th October 2023
(2 hours daily)

Course Description

The objective of this course is to enable the candidates to apply image processing methods to enhance images and make them useful for real life problem solving. The candidates will learn the basics of deep learning models and they can come up with solutions for problems including image processing, object identification and classification.

[Click Here to Register](#)

Image Processing and Deep Learning

Who can attend?

Anyone who is interested to learn image processing using OpenCV and Deep Learning Model Development. It is designed for

- Students pursuing engineering or any computer science degree.
- Working Professionals.
- Research students
- Teachers

Course Content

Session	Topic
1	Machine Learning, Classification, Regression & Clustering Image Processing in OpenCV
2	Image Cropping, Resizing, Translation, Scaling, Rotation, Dilation, Erosion, Thresholding, Binarization, Sharpening, Blurring images, Detecting Lines, Edges, Contours
3	Corners, Image Enhancement in OpenCV, Contrast Stretching, Histogram Equalization, Contrast Limited Adaptive Histogram Equalization, Image Segmentation, Face recognition, Video Analysis
4	Deep Learning, Artificial Neural Networks, Feedforward Neural Networks, Activation Functions, Sigmoid, ReLU, tanH etc.
5	Convolutional Neural Networks, CNN Implementation in Keras and TensorFlow., Image Classification using CNN, Image Data Generator and augmentation methods. VGGNet. Transfer Learning, VGGNet, Recurrent Neural Networks, Implementation of RNN in Keras

Fee and important dates

Course Fee	Rs. 1500/- (Including GST)
Last date for registration and payment	12th Oct 2023
Sharing of course page link and password	16 Oct 2023

Prerequisite

Knowledge in computer science and Python programming.

Certificate

Participation Certificate will be issued to all candidates who attend the course.

Minimum Requirements

Attendees must have a computer system with good internet connection.

Faculty

Dr. Vimala Mathew

Scientist 'E'

For more details

For more details contact vimala@calicut.nielit.in

0495 2287266,9446732691 (from 9.00AM to 5.30PM)

Terms and Conditions

- 1. In case any registered candidate could not attend the online session due to technical issue at their side there will not be any refund of the course fee and the sessions will not be repeated.*
- 2. In case the online course is cancelled /postponed due to some technical issue at NIELIT side and new date is not convenient to the candidate, our liability is limited to the refund of the course fee and NIELIT shall not be responsible for any consequential damages.*
- 3. 60% attendance and feedback submission are mandatory for awarding 'participation' certificate.*

For more details about our institution and facilities visit us

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Twitter: https://twitter.com/CAL_NIELIT

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Autonomous Scientific Society of
Ministry of Electronics & Information Technology,
Govt. of India



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