

ICAR-CIFE

Online Training Programme On Computer Vision in Fisheries Using Machine Learning

May 27 - June 1, 2024



ICAR- Central Institute of Fisheries Education
(Deemed University)
Panch Marg, Yari Road, Andheri (W)
Mumbai, 400061



Background

ICAR-Central Institute of Fisheries Education (CIFE), in over its 50 years of existence, has emerged as a centre of excellence in higher education in fisheries and allied disciplines. The Institute was established on 6th June 1961, under the Ministry of Agriculture, Govt. of India with assistance from FAO/UNDP. It came under the administrative control of Indian Council of Agricultural Research (ICAR) in 1979. Considering the wide mandate involving education, research and extension and recognizing the pivotal role played by CIFE in human resources development in fisheries, the institute was conferred the status of Deemed-to-be-University in 1989. The institute with its core strength in quality teaching, research extension and training has become a brand name in fisheries higher education.

In the past, ICAR-CIFE has conducted various training programmes in the field of Artificial Intelligence (AI) and Big Data Analytics. In addition, many courses related to machine learning and AI are offered at M.FSc and Ph.D level at this Institute. Students and faculty are working in different dimensions of machine learning and computer vision as a research work.

It is noted that the machine learning strategies in computer vision are supervised, un-supervised, and semi-supervised. The commonly used algorithms are neural networks, k-means clustering and support vector machine, Bayesian classifier, decision tree. The most recent applications of machine learning in computer vision are object detection, object classification, and extraction of relevant information from images, graphic documents, and videos. Additionally, Tensor flow, Faster-RCNN-Inception-V2 model, and Anaconda software development environment used to identify different objects, their tracking and extracting information from it.

This course is designed in such a way that it will have theory and practical session. In the practical sessions learning-by- doing and hands-on activities will be included. Course content will include following.

- ✓ Brief about machine learning and computer vision
- ✓ Exposure to different development tools and library in Python environments
- ✓ Different machine learning algorithms (Neural networks, k-means clustering and support vector machine, Bayesian classifier, decision tree)
- ✓ Introduction to computer vision
- ✓ Object detection, classification and extraction of information using R-CNN, F-CNN, YOLO etc.

Duration

27th May to 1st June, 2024 (6 days)

(Daily 5-6 hours with both theory and practical session from 10.30 am to 5pm)

Who should attend?

Scientists/Faculty/Technical Officers from ICAR/SAU/CAU/University, Masters and PhD scholars from ICAR/SAU/CAU/University. Participants who possess some prior knowledge of machine learning and computer vision will be an added advantage. The participants are required to have a Desktop/Laptop with good internet connection.

Registration form

1. Name:
2. Designation:
3. Department/division:
4. Qualifications:
5. Address for communication:
6. Mobile number:
7. Email id:
8. Prior knowledge in machine learning and computer vision: Yes /No
9. Level of usage: Beginner / Intermediate / Proficient
10. Reason for attending:
11. Name and signature of participant

Last date of Application submission

23rd May, 2024

Programme Fee

A fee of Rs. 5,000/- is charged for Scientists/ Faculty/ Technical Officers. Rs. 2,500/- for scholars from ICAR/SAU/CAU/University. This fee need to be paid to Account Name: ICAR Unit CIFE, Mumbai, Name of the Bank: State Bank of India (Account Number: 101323552I2, IFSC Code: SBIN0003117)

How to apply

Please use the format provided above (Registration Form) and email your application along with the proof of transfer of the course fee to Dr. Vinod Kumar Yadav (Mail: vinodkumar@cife.edu.in).

Program Director

Dr. Ravishankar C. N.

Director/Vice-Chancellor
ICAR-CIFE, Mumbai

Course Directors

Dr. Vinod Kumar Yadav

Senior Scientist, FEES Division
ICAR-CIFE, Mumbai

and

Dr. Arpita Sharma

Principal Scientist and Head of FEES
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