# Online Training Programme On Computer Vision in Fisheries Using Machine Learning

July 8 - July 13, 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 50 years of existence, has emerged as a centre of excellence in higher education 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 in1989. The institute with its core strength in quality teaching, research 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 AI and Big Data Analytics. Also many courses related to machine learning and AI is offered at MFSc and PhD level at this Institute. Students and faculty are working in different dimension of machine learning and computer vision as a research work.

The study has found 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 cars and persons in images. Programme content

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

- ✓ Brief about machine learning and computer vision
- ✓ Different machine learning Algorithms
- ✓ Introduction of Computer Vision
- ✓ Object detection, classification, and extraction
- ✓ Introduction of Software development environment

# Duration

8th to 13th July, 2024 (6 days)

### Who should attend?

Scientists/Faculty/Technical Officers from ICAR/SAU/CAU/ Any Other University, Masters and PhD scholars from ICAR/SAU/CAU/Any Other University. Participants possess some prior knowledge of machine learning and computer vision will add 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. Telephone/mob number:
- 7. Email id:
- 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 at bottom right corner.

# Last date of Application submission

5<sup>th</sup> July 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/Any Other University. Rs.1,500/- for scholars from ICAR-CIFE. 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). (Mobile no-9833426880)

Program Director Dr. Ravishankar C. N. Director/Vice-Chancellor ICAR-CIFE, Mumbai

Course Director

Dr. Vinod Kumar Yadav, Senior Scientist
FEES Division, ICAR-CIFE, Mumbai

**Dr. Arpita Sharma**, Principal Scientist and HoD, FEESD, ICAR-CIFE, Mumbai