About the event:

The Directorate of Higher Education, Government of Goa, presents a five-day Faculty Development Program (FDP) on "Exploring Deep Learning with TensorFlow: A Hands-On Approach" from 20th to 24th January 2025. This program targets research scholars, postgraduate students, and faculty, offering in-depth learning in AI, ML, and Deep Learning with a focus on TensorFlow. Combining theory and practice, the FDP aims to equip participants with skills for real-world AI applications. Sessions will be led by Dr. Hemprasad Y. Patil and Dr. Surya Prakash, providing insights into the latest AI and ML trends.

Topics to be covered:

- Introduction to Artificial Neural Networks (ANN)
- In-depth TensorFlow Programming
- Building an ANN from scratch with TensorFlow
- Building a Custom CNN and Transfer Learning based CNN with TensorFlow
- Prediction of Fraudulent Financial Transactions using TensorFlow
- Generic Model Deployment using TensorFlow

Target Audience (Any Discipline):

- Ph.D. Scholars
- U.G. / P.G. Students
- Faculty

Registration fee: **Free**

Registration Link:

https://forms.gle/eMJrFb4WxMWXmnj17

(Last Date: 15th January 2025)

- Only 35 Participants.
- Committee will have rights for finalising selection of participants.

Chief Patron:

Shri. Bhushan Savoikar
Director
Directorate of Higher Education, Govt of Goa.

Coordinator

Dr. Mahadev Gawas
State Higher Education Council
Directorate of Higher Education, Govt of Goa.
Mail: gawas-dhe.goa@gov.in
Contact: 8830084183

Resource Persons:

Dr. Hemprasad Y. Patil
Associate Professor
Military College of Telecommunication Engineering (Army), Mhow, Madhya Pradesh

Dr. Surya Prakash
Assistant Professor
Indian Institute of Information Technology, Allahabad, Prayagraj,
Uttar Pradesh

Venue: Conference Hall, Second Floor, Directorate of Higher Education (DHE), Porvorim, Goa

Note:

- **Participants will have to carry their own laptop.**
- **Participant Certificates will be issued only for 100% attendance.**

Faculty Development Program (FDP)

On

Exploring Deep Learning with TensorFlow: A Hands-On Approach

20th to 24th January 2025

Organized by

Directorate of Higher Education
Government of Goa

FDP SCHEDULE

S. No	Date	Session 1 (9:30AM -11:15AM)	(11:15AM to 11:30AM)	(11:30AM -1:00 PM)	LUNCH BREAK (1.00PM TO 2.00PM)	Session 2 (02:00PM - 03:15PM)	(3:15PM to 3:30PM)	(3:30PM -4:30 PM)
1.	20/01/25 (Monday)	**Resource Person:** **Dr. Surya Prakash** **Title:** Introduction to Artificial Neural Networks (ANN)	**Tea Break**	**Resource Person:** **Dr. Surya Prakash** **Title:** Introduction to Artificial Neural Networks (ANN)		**Resource Person:** **Dr. Surya Prakash** **Title:** Fundamentals of Neural Network Operations with Python	**Tea Break**	**Resource Person:** **Dr. Surya Prakash** **Title:** Fundamentals of Neural Network Operations with Python
2.	21/01/25 (Tuesday)	**Resource Person:** **Dr. Surya Prakash** **Title:** Backpropagation Algorithm		**Resource Person:** **Dr. Surya Prakash** **Title:** Backpropagation Algorithm		**Resource Person:** **Dr. Surya Prakash** **Title:** Hands-on Session on Python Programming and System configuration		**Resource Person:** **Dr. Surya Prakash** **Title:** Hands-on Session on Python Programming and System configuration
3.	22/01/25 (Wednesday)	**Resource Person:** **Dr. Hemprasad Patil** **Title:** In-depth TensorFlow Programming		**Resource Person:** **Dr. Hemprasad Patil** **Title:** In-depth TensorFlow Programming		**Resource Person:** **Dr. Hemprasad Patil** **Title:** Hands-on: Building an ANN from scratch with TensorFlow		**Resource Person:** **Dr.Hemprasad Patil** **Title:** Hands-on: Building an ANN from scratch with TensorFlow
4.	23/01/25 (Thursday)	**Resource Person:** **Dr. Hemprasad Patil** **Title:** Hands-on: Building a custom CNN with TensorFlow for Medical Image Classification		**Resource Person:** **Dr. Hemprasad Patil** **Title:** Hands-on: Building a custom CNN with TensorFlow for Medical Image Classification		**Resource Person:** **Dr. Hemprasad Patil** **Title:** Hands-on: Implementing Transfer Learning using Pre-trained Models with Tensorflow using Healthcare data		**Resource Person:** **Dr. Hemprasad Patil** **Title:** Hands-on: Implementing Transfer Learning using Pre-trained Models with Tensorflow using Healthcare data
5.	24/01/25 (Friday)	**Resource Person:** **Dr. Hemprasad Patil** **Title:** Hands-on: Prediction of Fraudulent Financial Transactions using Tensorflow		**Resource Person:** **Dr. Hemprasad Patil** **Title:** Hands-on: Prediction of Fraudulent Financial Transactions using Tensorflow		**Resource Person:** **Dr. Hemprasad Patil** **Title:** Hands-on: Generic Model Deployment using TensorFlow Lite		**Resource Person:** **Dr. Hemprasad Patil** **Title:** Hands-on: Generic Model Deployment using TensorFlow Lite