



# ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) on

## Transfer Learning and its Applications

(3rd July– 12th July 2023)

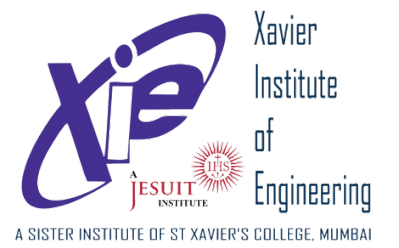
Organised by

Electronics & ICT Academy, NIT Warangal

in Association with

Department of Computer Engineering

Xavier Institute of Engineering, Mumbai, Maharashtra.



(Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)

### Preamble:

"Electronics & ICT Academy" was set up at NIT Warangal with financial assistance from MeitY, GoI. The jurisdiction of this academy includes Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry and Andaman & Nicobar Islands. This academy's role is to offer Faculty Development Programmes in standardized courses and emerging areas of Electronics, Information Communication Technologies, training & consultancy services for Industry, Curriculum development for Industry, CEP for working professionals, advice and support for technical incubation and entrepreneurial activities.

### About the FDP:

This FDP aims at providing strong theoretical background along with practical experience in the field of Transfer learning and its applications and how it could be efficiently done with the help of Machine learning and Deep Learning algorithms. In the growing and emerging era of Digital India initiative, the use of Transfer Learning becomes pertinent in the field of Image recognition, Natural language processing, Speech recognition, Medical imaging, Autonomous driving, Image classification, Gaming, Sentiment analysis and Spam filtering to determine and contribute towards socio-economic status of the regions and the country as whole. The transfer learning strategies, deployment and applications would be delivered by eminent resource persons of ML & DL experts. This FDP aims to impart knowledge and train on fundamentals of engineering aspects of DL & ML and insights in recent transfer learning applications. FDP will be helpful for the faculties and researchers working in the areas of DL/ML for Image classification, NLP, Medical imaging, Speech recognition.

### Major Course Contents:

- Introduction to Machine Learning and Applications
- Learning with Regression
- Learning with Trees
- Ensemble Learning
- Learning with Classification
- Clustering approaches
- Dimensionality Reduction
- Fundamentals of Neural Network
- Introduction to DL and its applications
- Convolution Neural Network (CNN)
- Recurrent neural network (RNN)
- What is transfer learning and its usage? How does transfer learning work?
- How transfer learning is being used as a part of many deep learning projects
- Step-by-step plan for the transfer learning process
- Traditional machine learning vs. Transfer learning
- Generative Adversarial Networks (GANs)
- Introduction to Recommender Systems and Transfer Learning in Recommender Systems
- Transfer learning in Speech recognition, Medical imaging, Natural language processing
- Transfer learning in Sentiment analysis, Computer vision, Image recognition and Image classification

### Resource person for this programme:

The programme will be conducted by the faculty members from NIT Warangal; Academicians in the concerned field from IITs/NITs/IIITs are invited to deliver lectures in the programme. Speakers from industries are also expected to deliver as part of the course.

### Registration Fee Particulars:

Faculty and Research Scholars	Rs.750/-
Industry Participants	Rs.2250/-

Participants need to pay the Registration Fee Online using the following details

#### Online Transfer Details

Account Name: Electronics & ICT Academy NITW

Account No: 62423775910

IFSC: SBIN0020149

Bank and Branch: State Bank of India, NIT (REC) Warangal

### How to apply:

Participants are required to fill the registration form given below (Page No.2)

### Selection Criteria:

Selection will be done based on first-come-first-serve basis to a maximum number of 60 (sixty). Additionally, 10 participants from industry are allowed to participate. The list of selected participants will be intimated through e-mail. In case a candidate is not selected, the DD will be sent back. Candidates will be issued satisfactory certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

### Important Dates:

Last date (Application & DD)	30.06.2023
Selection List by E- mail	01.07.2023
Duration	03.07.2023 to 12.07.2023

### About NIT Warangal:

National Institute of Technology, Warangal is the first among 17 RECs setup as joint venture of the Government of India and the state government. Over the years the college has established itself as a premier Institute imparting technical education of a very high standard leading to the B.Tech degrees in various branches of engineering, M.Tech and Ph.D programmes in various specializations. All B.Tech and M.Tech programmes of NIT Warangal are NBA accredited.

### About XIE, Mumbai:

Xavier Institute of Engineering (XIE), a sister institute of St. Xavier's College, Fort, Mumbai was established in 2005, and is a part of an international network of Jesuit Educational Institutions which includes 138 universities and 3413 Educational Institutions in 120 countries. XIE has got NBA accreditation for 2 programmes and also NAAC accredited. XIE is the only Engineering college in India to have a Gait laboratory. This laboratory is sponsored by Marquee University, USA. XIE is ranked 57 among the top 170 Engineering Institute Rankings , 2022 . XIE received the Green Mission Award from ONP Solar Private Limited for three consecutive years(2019, 2020, 2021). XIE also received the World Education Congress Award - 2022 .

### About Computer Engineering Department :

Computer Engineering department started functioning from the year 2005 with an intake of 60, offering Bachelors degree in Computer Engineering. The department has a mission to provide knowledge of computer engineering and with related technical skills to solve various computer engineering problems along with industry interaction and to nurture social and professional ethics in our undergraduates and encourage them to have lifelong learning.



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1. Name :
2. Designation :
3. Institution :
4. Email :
5. Mobile :
6. Bank details

Reference No:

Amount:

Bank :

Date:

7. Address for Correspondence:
8. Educational Qualification:
9. Subjects taught so far:
10. No. of refresher courses/workshops attended:
11. Total Experience (in years): \_\_\_\_  
Teaching: \_\_\_\_ Research: \_\_\_\_ Industry: \_\_\_\_
12. Do you belong to SC/ST : YES /NO

## Declaration

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the FDP and shall attend the course for the entire duration. I also undertake the responsibility to inform the Coordinator in case, I am unable to attend the course.

Date

Signature of the Applicant

## SPONSORSHIP CERTIFICATE

Dr. /Mr. /Ms. .... is an employee of our Institute / Organization and is hereby sponsored to participate in the FDP on "Transfer learning and its Applications", sponsored by Electronics & ICT Academy during 03rd July – 12th July 2023 at XIE, Mumbai, Maharashtra -400016

Signature of Head of Institution  
(with seal)

Address for correspondence

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It is requested to all the delegates, after completion of application form, all the payment details, screenshot of the payment and scanned application form has to be uploaded in the following online registration link.

Registration Link:

<https://forms.gle/uLCAKA1ZbCYLbJf7A>

For more details about Electronics & ICT Academy, NIT, Warangal, please visit:  
<https://nitw.ac.in/eict>

For more enquiries please contact:

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## Coordinators

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