

# Experimental Design and Optimization of Research in Machine Learning

DATE: 12/06/2020

# **Event Coordinator(s)**

1. Dr. Vijay Katkar

2. Ms. Meena Ugale

Time & Place:

1st -12th June 2020

**XIE** 

**Online Course** 

# **Department:**

Information Technology

No of participants: 42

This FDP is conducted on online platform for faculties and research scholars with the basic Knowledge of Python & Machine Learning/Data Mining.

Details of the resource person: Dr. Vijay Katkar PhD in Computer Engineering with Specialization in Machine Learning and Network Security. His research interests are Machine learning, Computer Vision and Internet of Everything.

#### Course Contents:

- 1. Types of research papers
- 2. Selection of dataset for research
- 3. Analyzing and exploring the dataset
- 4. Training the model using machine learning methods
- 5. Analyzing and exploring efficiency of trained machine learning based model
- 6. Optimizing classification efficiency of machine learning based models Effectively presenting the results in research papers
- 7. Concluding and summarizing the results in research paper

## Participant Feedback and Benefits:

Following points were appreciated by Participants:

- Hands-on Sessions
- Real-time application
- Covered topics from Basic to Advance
- Interactive Sessions

## Benefits:

Participants will be able to Design and carryout experiments using Machine Learning in any domain

#### RESOURCE PERSON

Dr. Vijay Katkar PhD in Computer Engineering with Specialization in Machine Learning and Network Security. His research interests are Machine learning, Computer Vision and Internet of Everything.

#### COURSE COORDINATORS

Prof. Jaychand Upadhyay is pursuing PhD in Information & Communication Science from Sophia University, Tokyo, Japan. His research Interests are Deep Learning and Computer Vision.

Prof. Vijay Jumb holds a Master's degree in Computer Engineering from Mumbai University. His research Interests are Computer Vision and Big Data Analytics.

#### PREREQUISITE

- ♦ Basic Knowledge of Python
- Basics of Machine Learning/Data Mining

#### COURSE COMPLETION CRITERION

- ♦ Complete All Quizzes
- Submit all Assignments
- Submit a Research Paper in International Conference or UGC approved Journal

#### ORGANIZING COMMITTEE

#### **Chief Patrons**

Fr. Dr. Arun D'Souza, S.J., Chairman, XIE

Fr. Dr. Keith D'Souza, S.J., Rector, St. Xavier's College

Fr. Dr. John Rose, S.J., Director, XIE

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Dr. Y. D. Venkatesh, Principal, XIE

Fr. Fabian Barreto, S.J., Administrator, XIE

#### Convener

Prof. Chhaya Narvekar, HoD (Information Technology)

#### Coordinator

#### Prof. Meena Ugale

Assistant Professor, Dept. of Information Technology Ph: 98676 46658. Email: meena.u@xayier.ac.in

The Higher Education Digest has rated XIE as one of the 'Top 50 must watch Engineering Colleges' in India

#### ABOUT INSTITUTION

Xavier Institute of Engineering (XIE), a sister Institution of St. Xavier's College, Fort, Mumbai, is an Engineering college in central Mumbai, established in 2005, and is a part of an International Network of Jesuit Educational Institutions which includes 138 Universities and 3413 Educational Intuitions in 120 countries. The Jesuit Educational Network in India includes 84 Colleges, 3 Universities and 3 Engineering colleges. Jesuit educational efforts are directed to training the minds and forming the heart. The management of XIE is well known for designing and upholding the highest standards for Engineering Education. Every year around 50 companies visit XIE for campus recruitment. In a Tol Engineering Survey conducted in 2015, XIE was rated 36 among the Private, Unaided Engineering Colleges in Mumbai and among top 30 in India with a high Perceptual Score in 2018.XIE is now NAAC accredited. XIE is the only Engineering college in India to have a Gait laboratory. This laboratory is sponsored by Marquette University, USA.

#### VISION OF XIE

To nurture the joy of excellence in a world of high technology

#### MISSION OF XIE

To strive to match global standards in technical education by interaction with industry, continuous staff training and development of quality of life

#### COURSE CONTENTS

- · Types of research papers
- Selection of dataset for research
- Analysing and exploring the dataset
- Training the model using machine learning methods
- Analysing and exploring efficiency of trained machine learning based model
- Optimizing classification efficiency of machine learning based models
- · Effectively presenting the results in research papers
- Concluding and summarizing the results in research paper

All experiments are performed using Python







# Xavier Institute of Engineering

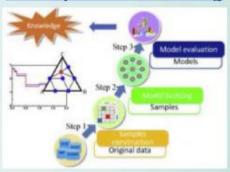
A sister Institute of

St. Xavier's College, Fort, Mumbai is organizing

A Six-DayWorkshop

Experimental Design and optimization of Research in Machine Learning

Under the Department of Information Technology



### **DURATION AND TIMING**

Two Weeks (1 st June – 12th June 2020)
Three Days a Week (Monday, Wednesday, Friday)
Timing: 2.00 pm to 5.00 pm
Platform: Online

#### REGISTRATION

No course and certification fees

Participants can register online

Registration Link: https://forms.gle/d3np5kE8vvbs7m47 Complete your registrations on or before 30\* May, 2020 (4.00 PM)

Note: Certificates are issued to only those participants who successfully complete the program requirements.