

**REGISTRATION FORM**  
**(FDP on Machine Learning & Deep Learning  
Techniques For Information Retrieval)**

Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Qualification: \_\_\_\_\_

Department: \_\_\_\_\_

Organization: \_\_\_\_\_

Mobile: \_\_\_\_\_

Email-id: \_\_\_\_\_

Experience(Teaching/Industry): \_\_\_\_\_

Demand Draft No: \_\_\_\_\_

Signature of the Candidate

**SPONSORSHIP CERTIFICATE**

Ms./Mr.

\_\_\_\_\_  
(Name & Designation) has been authorized to attend  
all sessions of the FDP during the period from 12<sup>th</sup> June  
to 14<sup>th</sup> June 2019

OFFICE SEAL

SIGNATURE  
Head of Institution

**CHIEF PATRON**  
**Dr.S.Jagathrakshagan**  
Founder Chairman

**PATRONS**  
**DR.J.SUNDEEP AANAND**  
President, BIHER  
**Dr.J.SWETHA SUNDEEP AANAND**  
Managing Director, BIHER  
**Dr.V.KANAGASABAI**  
Vice Chancellor, BIHER  
**Dr.K.P.THOYAMANI**  
Pro Vice Chancellor, BIHER  
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Registrar, BIHER  
**Dr.R.HARI PRAKASH**  
Addl.Registrar, BIHER  
**Dr.J.HAMEED HUSSAIN**  
Dean – Engineering, BIHER  
**Dr.R.VENKATESH BABU**  
Dean – Academics, BIHER  
**Dr. K.P. KALIYAMURTHIE**  
HOD – Dept. of CSE

**CONVENER**  
**Dr.S.Nedunchelivan**  
Dean CSE, BIHER

**Co-CONVENER**  
**Dr.R.Kavitha**  
Associate Professor, BIHER

**ORGANIZING TEAM**  
**Mrs.D.VIMALA**  
Assistant Professor, BIHER  
**Ms.I.MARY LINDA**  
Assistant Professor, BIHER  
**Mr.A.V.ALLIN GEO**  
Assistant Professor, BIHER  
**Mr.R.MUTHU VENKATA KRISHNAN YADAV**  
Assistant Professor, BIHER

**FACULTY DEVELOPMENT  
PROGRAMME**

on  
**Machine Learning & Deep Learning Techniques  
For Information Retrieval**

**12<sup>th</sup> -14<sup>th</sup> June 2019**

**Organized by**  
**Department of Computer Science Engineering**

**In Association with**  
**National Social Summit (NSS) IIT Roorkee**  
**Initiated by EduxLabs**  
**&**  
**IOT Club**



**BHARATH INSTITUTE OF HIGHER  
EDUCATION & RESEARCH**

(Approved by UGC and AICTE)  
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Chennai – 600073 Tamil Nadu, India  
[www.bharathuniv.ac.in](http://www.bharathuniv.ac.in)

## ABOUT THE INSTITUTION:

The first self-financing Engineering College in the name of Bharath Institute of Science and Technology (BIST) was started in Tamil Nadu in 1984 by Sri Lakshmi Ammal Educational Trust, established by the academic visionary Dr.S.Jagathrakshakan. The trust then started Sree Balaji Dental College and Hospital, in 1989. Sree Balaji Dental College and Hospital was first recognized as a Deemed to be University by MHRD in July 2002, under section 3 of the UGC Act 1956 under the new trust Bharath Institute of Higher Education and Research (BIHER). The Bharath Institute of Science and Technology (BIST) was then brought under the ambit of Bharath Institute of Higher Education and Research (BIHER) in January 2003.

Thus, Bharath Institute of Higher Education and Research (BIHER) is providing multi-stream, multi-cultural and high quality education to nearly 10000 students from around the world. It is functioning in a sprawling area of 305 acres of land with 1.3 crore sq.ft buildings located in 6 Campuses both in Tamil Nadu and Pudhucherry with the state of the art infrastructure facilities. There are well qualified Teaching Faculty members to teach various UG and PG programs and to guide Ph.D. Research.

## About FDP

The objective of the FDP is to introduce fundamentals of data mining and machine learning techniques with their real time applications. Overall, this FDP is serving to be a great platform for faculty and researchers to upgrade their knowledge in the area of Machine Learning, Deep learning Techniques and its applications.

FDP on Machine Learning, Deep Learning techniques are concerned with Data the analysis, design and development of methods for the classification or description of patterns, objects, signals and processes.

## FDP Course Description with Lab sessions

Getting Started with Machine Learning

- Applications of Machine Learning
  - Why Machine Learning is the Future
  - opportunity & challenge in Machine Learning
- Lab: Installing Python and Anaconda (Mac, Linux & Windows)

About the dataset Processing

- Importing the Libraries
  - Importing the Dataset
  - Missing Data, Categorical Data
- Lab: Data processing Exercise

Regression Techniques for Information Retrieval

- Simple Linear Regression
  - Multiple Linear Regression
  - Polynomial Regression
  - Support Vector Regression (SVR)
  - Decision Tree Regression
- Lab: Regression Exercise

Classification Techniques

- Logistic Regression
- K-Nearest Neighbors (K-NN)
- Support Vector Machine (SVM)

Natural Language Processing

- Libraries used for NLP
  - Research Trends in NLP
  - Application of NLP for real world applications.
- Lab: Sentimental Analysis Tweets from social media platform Twitter Using NLP Tool Kit

Artificial Neural Networks & Deep Learning

- How do Neural Networks work?
  - The Activation Function
  - How do Neural Networks learn?
  - Gradient Descent, Stochastic Gradient Descent, Back propagation
- Lab :Create Artificial Neural Networks

## EXPECTED OUTCOME:

- Up-gradation of knowledge of participants in AI thereby resulting in Enhanced teaching-learning process
- Demonstration of real life problems using undoubtedly top language Python
- Identification of clear and concise research Problem (Ph.D.) in AI , Machine learning domain.

## RESOURCE PERSONS

Experts from well-known Premier institute and Industry

## WHO SHOULD ATTEND

The program is open to faculty and research scholars from all the colleges and universities. Industry personnel working in the concerned/allied discipline may also apply.

## HOW TO APPLY:

Interested candidates should fill the registration form and send your completed application form through mail on or before 10<sup>th</sup> June 2019 to the mail-ids given below.

([kaviselva@gmail.com](mailto:kaviselva@gmail.com))

## REGISTRATION FEES:

1. Faculty and Research Scholars:Rs.1600/-
2. Industry Person: Rs.2000/-

The amount shall be sent by DD in favour of “Bharath Institute Of Science and Technology”, payable at Chennai.

## BOARDING AND LODGING:

Facilities will be made available upon prior request with minimal charges. Participant must inform for the same before 10<sup>th</sup> June 2019.

## Contact person:

**Dr.S.Neduncheliyan (9994560523)**

**Dr.R.Kavitha(9443555049)**

## Note:

**1.For hands on session participants have to bring your computer system/laptops.**

## System Configuration Required:

**Window OS 8/10, i3 / i5 64 bit Processor, 4GB/8GB RAM**