## FACULTY DEVELOPMENT PROGRAM

On

# MACHINE LEARNING AND PEDAGOGY

# 11<sup>th</sup> – 15<sup>th</sup> March, 2020



#### Organized by

Department of Computer Science & Department of Electronics Deen Dayal Upadhyaya College University of Delhi

#### in collaboration with

Guru Angad Dev Teaching Learning Centre (A Centre of MHRD under PMMMNMTT) SGTB Khalsa College University of Delhi

#### NATIONAL COORDINATOR

Dr. Vimal Rarh

Project Head & Joint Director GAD-TLC of MHRD SGTB Khalsa College, DU

### ORGANIZING COMMITTEE@ DDU College

### PATRON

Dr. H. C. Jain Officiating Principal Deen Dayal Upadhyaya College

#### **CONVENORS**

Dr. Rajni Bala Associate Professor Department of Computer Science & Dr. Ravinder Kaur Associate Professor Department of Electronics

### **CO-ORDINATOR**

Dr. Rampal Singh Rana Associate Professor Department of Computer Science

## CONTACT

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### **Objectives of FDP**

The main objective of an FDP is to enhance and enrich the professional education and competence of the teaching fraternity in order to be in tune with changing time, especially in the field of technology so that they can do justice to the teaching-learning process. In today's time. when technological advancements are revolutionizing the world as we know it; the teachers must keep themselves abreast. Today, Artificial intelligence and Machine Learning (ML) are the leading topics, as they will impact all segments of daily life by 2025, with applications in a wide range of industries such as healthcare, financial services, marketing and sales, insurance and customer service. The main goal of ML is to devise learning algorithms which can facilitate learning automatically without human intervention. It can be used in multiple domains as it helps in analyzing data and predicting trends. Awareness on MOOCs and changing roles of teachers in technology driven Higher Education will also be covered.

### **Call for Participation**

The Department of Computer Science and Department of Electronics in collaboration with Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College are organizing a Faculty Development Program on **"Machine Learning and Pedagogy"** from 11<sup>th</sup> to 15<sup>th</sup> March 2020 in **Deen Dayal Upadhyaya College, Sector-3, Dwarka**. We invite Faculty members/Research scholars from various institutes to participate in this FDP. About Deen Dayal Upadhyaya College, University of Delhi

Deen Daval Upadhyaya College, is one of the premier colleges of the University of Delhi, with highly qualified academicians imparting education in different fields. We can proudly boast of the best infrastructure in the University of Delhi. The Science faculty strives hard to impart quality education in different disciplines to create young researchers, professionals to shoulder challenges of the twenty-first century. Towards this mission, the College organizes lectures by eminent scientists and academicians, seminars and conferences to provide a platform to generate and disseminate knowledge. The main aim of the college is to maintain an intellectually stimulating and educational holistic environment for institutional success by exploiting the true potential of individuals and exposing them to research areas.



#### About GAD-TLC of MHRD, SGTB Khalsa College, University of Delhi

"Guru Angad Dev Teaching Learning **Centre**" is a center of MHRD under the prestigious Pandit Madan Mohan Malviya National Mission on Teachers and Training (PMMMNMTT) of the MHRD. Govt. of India. The objectives of the Teaching Learning Centre are to prepare Modern age teachers who are fully ICT savyy and can develop on their own e-content and disseminate it to the students and perform many other digital activities to enhance the quality of education imparted to the students. Teachers are being trained in various levels of ICT competencies from basic level to management of MOOCS (Massive Open Online Courses) as well as in pedagogy (virtual & blended) and curriculum development.

As per UGC Regulations 2018, various programs like one month "Faculty Induction Program" (FIP) and One-Two weeks "Faculty Development Program" (FDP) conducted by PMMMNMTT centers are recognized for CAS.

**The Core Team at GAD-TLC** has an expertise of successfully completing the development of e-content in four quadrant forms for 89 courses for ePGPathsala project of UGC and 42 MOOCs for SWAYAM platform of MHRD, Govt. of India.

#### **Topics to be covered**

- Technology enabled Pedagogy: MOOCs and ARPIT
- Supervised Learning : Single Perceptron and Multilayer Perceptron network linear regression, logistic regression, k-nearest neighbor, support vector machines, Naïve-Bayes, Decision Tree, Random Forest
- Unsupervised Learning
- Feature Selection/Extraction
- Boltzman Machine, Convolution Neural Network
- Implementation of all Machine Learning Algorithms using Python API (sklearn, keras, tensorflow etc.)

Resource Persons from IIT-Delhi, JNU, IIIT-Delhi

#### **Registration Details**

The interested participants must fill the registration form by clicking at FDP Registration Form. The registration fees is **Rs. 1000/-**. The last date for registration is **5**<sup>th</sup> **March, 2020**.

#### **Payment Details**

All payments shall be made to following account through NEFT only. Payable to: **The Principal, Deen Dayal Upadhyaya College** Bank Name: **Oriental Bank of Commerce** Account Type: **Saving** Account Number: **52012010003380** IFSC: **ORBC0105201**