





## Hands on Artificial Intelligence 5 day Workshop

Inaugurated By Shri. Jayesh Ranjan IAS, on 27th July - 11.00AM



Shri. Jayesh Ranjan, IAS

Principal Secretary to
Govt. of Telangana

Chief Guest



Prof. G. Sundar Sr. Professor & Director BITS Pilani, Hyderabad

**Guest of Honour** 

#### **HIGHLIGHTS**

Intution behind Algorithms
Predict using various Algorithms
Recommender Algorithm
Build, Train & Deploy Machine
Learning Models
Create, Train & Deploy Chat Bots



Hanu Yedluri Presenter, Principal Data Scientist, CEO - Brainlabs.Ai



Prof.Aruna Malapati Faculty in-Charge, CIIE BITS Pilani, Hyderabad



Padma Raju Program Manager



Prashant Sinha Incharge - TBI BITS Pilani Hyderabad

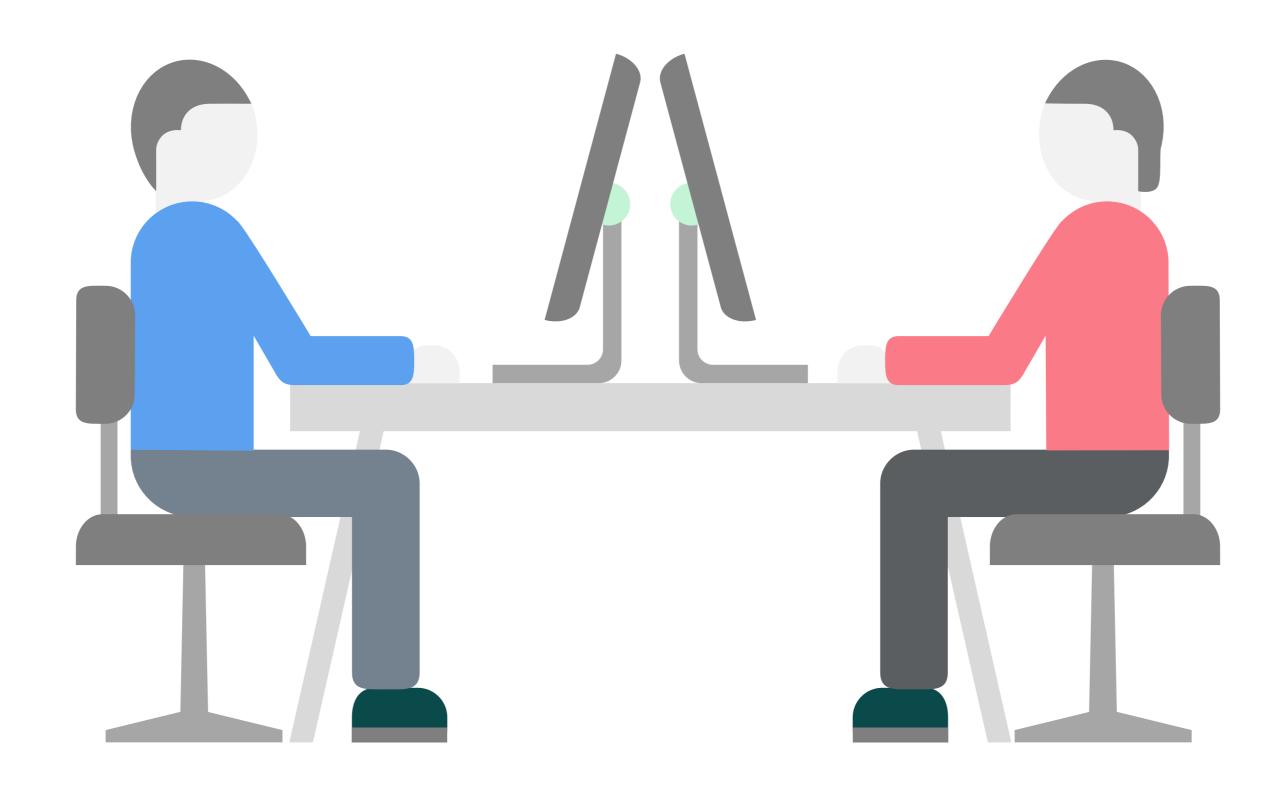
27.07.20 - 31.07.20





# INDUSTRY ORIENTED HANDS ON **(2)**ARTIFICIAL INTELLIGENCE WORKSHOP

FACULTY & STUDENTS





## **WORKSHOP OUTCOMES**

BITS Pilani
Hyderabad Campus
Technology Business Incubator

PARTICIPANTS EXPOSURE







**PARTICIPATION CERTIFICATE** 



**INTERNSHIP OPPORTUNITY** 



## **AGENDA**



5 DAY ARTIFICIAL INTELLIGENCE WORKSHOP



#### **TRAINING**

Detailed Discussion on Machine Learning algorithms, Al Chat Bots and different use cases



#### HANDS ON LAB, ASSESSMENTS, ASSIGNMENTS

Get Free Access to the Lab, Practice in Real-Time as the instructor demos



#### **CERTIFICATE**

After successful completion of assignments and assessments get a Certificate



### **INDUSTRY EXPERT PROFILE**







Hanu Yedluri
Principal Data Scientist

- 1. Seasoned Leader with more than 22 years of experience in Fintech, LendingTech, WealthTech, Edtech & Legal Domain
- 2. Expert in the Data Analytics, Product Design, Operations & Process Automation
- 3. Founded two online platforms <u>www.instaemi.com</u>, <u>www.brainlabs.ai</u> and running successfully.
- 4. Passionate in teaching, delivers training in Artificial Intelligence, ML, DL, Blockchain and Cloud Technologies
- 5. Qualified Masters Graduate in Computer Science, combines math and neuro psychology to solve various problems
- 6. Worked in Global Companies like Bank Of America, Merrill lynch and Orlans Associates











#### **INTRODUCTION**

Brief Discussion about the agenda



#### **ACCOUNT CREATION**

Create a lab account for Machine Learning



#### **DATASETS**

What, Where



#### **DATA MUNGING**

Operations, Features, Attributes



#### ETL

Load, Transform and View



#### **STATISTICS & LINEAR PROGRAMMING**

Recap Various Learning
Techniques



#### **PROBABILITY**

Prediction and Probability



## **DAY 02**

SUPERVISED MACHINE LEARNING - REGRESSION



6

01.

#### **DATASETS**

Understand Datasets, Attributes, Features

02.

#### LOAD, CLEAN

Load From Various Sources, Apply Cleaning

03.

#### **SPLIT**

Create Right Train & Test Data to Address Overfitting & Bias

04.

#### **ALGORITHMS**

Learn About Various Regression Algorithms 05.

#### TRAIN, SCORE, EVALUATE

Train the Machine to predict and understand the results accuracy

06.

#### **COMPARISION**

Compare with Other Similar Algorithms Results



## DAY 03 CLASSIFICATION ALGORITHM



**CLASSIFICATION** 

Discuss Various
Algorithms and their
benefits

#### **EXPERIMENT**

Take a Dataset, Train & Score the Prediction

#### **RESULTS**

Discuss the Results and Interpret the same

## **DAY 04**

#### CLASSIFICATION & RECOMMENDER



#### RECOMMENDER

Understand the intuition behind the algorithm & Industry's Usage with context

#### **RESULTS**

Understand the results, interpret and measure the efficiency among various algorithms.

#### **EXPERIMENT**

Create an experiment with Dataset, apply the algorithm, Train, Score & evaluate the Prediction

#### **DEPLOY & TRAIN**

Deploy the algorithm to the world and access from a third-party application using API

#### **ARTIFICIAL INTELLIGENCE**

Artificial intelligence, sometimes called machine intelligence, is intelligence demonstrated by machines, unlike the natural intelligence displayed by humans and animals.



## Day 05



DESIGN, DEPLOY & TRAIN CHAT BOT



#### **CHAT BOT**

Create a Chat bot from scratch, train the bot with the data



#### **TRAIN & DEPLOY**

Develop various channels and deploy the chat bot solution on to Facebook, Telegram etc..