

GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA

Department of Information Technology

Activity Report

Name of Event: Artificial Intelligence and Machine Learning

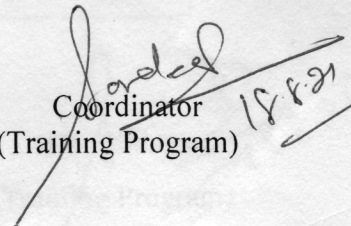
Date and Venue of Event: Four Weeks (16.07.2021 to 13.08.2021) Online Mode

Course Contents:

Introduction, Mathematical Foundations, Prepare data for Machine Learning, Introduction to Python, Working with Data, Creating and Manipulating Bar Charts, Line Charts, Scatterplots using Matplotlib, Supervised Machine Learning – Classification and Regression, Unsupervised ML- Clustering, Ensemble Learning – Bagging, Boosting and Stacking, Random Forest, Adaboost, Gradient Boosting Machine, Perception, Evaluating ML Algorithms -Split into Train and Test Sets, K-fold Cross Validation Leave One Out Cross Validation, Understand different error metrics such as MSE and MAE in the context of Machine Learning, Deep Learning – problems related to text, images and speech, Discussions and closing.

Expected Benefits and how it will be benefited

Four weeks training program was conducted and organized by Dr. Sandeep Kumar Singla, Assistant Professor, Department of Information Technology, GNDEC Ludhiana. This training program was conducted under the future Skill technologies program as the coordinator of the training program has already attended online faculty training on “AI and Machine Learning” held at IIT Kanpur (online mode) from 14th-24th June 2021. The contents of the course were informative, practical oriented and multidisciplinary in nature. The sessions of the course were equipped with a lot of knowledge about artificial intelligence and machine learning tools and techniques such as classification, regression and clustering. Artificial Intelligence and Machine Learning may be fruitful to our students as it has the capability of gathering huge and mottled information from diverse sources in and around the world. The focus of the program was on the extraction of optimal and fruitful information from large datasets through the use of proper data pre-processing methods before the actual application of ML methods. Students also got knowledge about the performance evaluation of various models and various error metrics such as MSE and MAE. Students worked on various datasets to get exposure to various machine learning algorithms such as regression, classification and clustering. Students explored the practical use of ML and Deep Learning which may be fruitful for their forthcoming project work, training and different practical-oriented subjects.


Coordinator
(Training Program) 18/8/21

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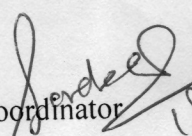
Department of Information Technology

Four weeks training program on "Artificial Intelligence and Machine Learning"

(16.07.2021 to 13.08.2021)

List of Participants

Sr. No.	Name of the Student	University	Sr. No.	Name of the Student	University
1	Harkirat Kaur	1905334	29	Harmanpreet Kaur	1905337
2	Priyanshu Tiwari	1905380	30	Muskan Kaur Channa	1905365
3	Mayank Mishra	1905234	31	Shubham Savarn	1905400
4	Rishav	1905261	32	Anmol Singh	1905307
5	Sourabh Kumar	1905270	33	Dharamveer singh	1905323
6	Arshdeep Singh	1905309	34	Prabhjot Kaur	1905377
7	Astha	1905312	35	Mahak	1905360
8	Divyanshu Kumar	1905326	36	Janav makkar	1905342
9	Krishan	1905355	37	Prabhjot Kaur	1905376
10	Rajan kumar singh	1905382	38	Abhay Tiwari	1905294
11	Subham Kumar	1905404	39	Anshita Behal	1905308
12	Tarun Sehgal	1905407	40	Balram Yadav	1905314
13	Bharat Adya	1905316	41	Nikhil Kumar	1905369
14	Inderveer kaur	1905341	42	Ruchir tulsyan	1905390
15	Jasmine kaur	1905346	43	Arshmeet Kaur	1905310
16	Lekhnath Khanal	1905358	44	Gurpartap Singh	2005006
17	Lokesh Dhingra	1905359	45	Shubham Bhardwaj	2005015
18	Neha Yadav	1905368	46	Adarsh kumar	1905298
19	Jaskirat Singh	2005007	47	Vishal kumar	1905413
20	Chandni kumari	1905317	48	Abanish Kumar	1905293
21	Kanishka Sharma	1905349	49	Kirandeep Kaur	1905353
22	Kishan Tiwari	1905354	50	Satinder kumar	1905393
23	Ridhim chugh	1905387	51	Sharandeep Singh	1905396
24	Simranpreet Kaur	1905402	52	Rishabh Kumar	1905388
25	Darshdeep Singh	1905320	53	Agam Singh	1905299
26	Rohit Kumar	1905389	54	Jasjot singh bagga	1905343
27	Vanshika chaudhary	1905412	55	Mansi Sharma	1905362
28	Shubham chaudhary	1905399			


Coordinator
(Training Program)
18.8.21