



DRONACHARYA

College of Engineering



Hands-on Workshon on AI and Machine Learning

14th Feb - 28th March, 2025

GUEST SPEAKERS



Mr. Anuj Sirohi



Ms. Jyotismita Barman



Mr. Subhanu Halder



Mr. Vipul Kr. Singh

EVENT SCHEDULE

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
14 Feb	21 Feb	28 Feb	07 March	21 March	28 March
<ul style="list-style-type: none"> a) Introduction to Machine Learning (30 mins) b) Types of learning problems (30 mins) c) Mathematical foundations (3 hours) d) Linear Regression (1 Hr) e) Demo (1 Hr) 	<ul style="list-style-type: none"> a) Classification Methods: Logistic regression (30mins) b) KNN (30 mins) c) Tree based methods (45 mins) d) Support vector machine (1 Hr) e) Unsupervised Learning: PCA (30 mins) f) Clustering (30 mins) g) Demo 	<ul style="list-style-type: none"> a) History of AI and emergence of Deep Learning (1 Hr) b) Introduction to Perceptron (1 Hr) c) Introduction to ANN (1.5 Hr) d) Hands-on ANN using Google Playground (1 Hr) e) Demo code for ANN (1 Hr) f) Project Introduction (30 min) 	<ul style="list-style-type: none"> a) Introduction to CNN (2 Hr) b) Demo for CNNs (1 Hr) c) Introduction to RNNs and LSTMs (2 Hr) d) Demo for RNNs and LSTMs (1 Hr) 	<ul style="list-style-type: none"> a) Introduction to GNNs (1 Hr) b) Overview of auto encoders (1 Hr) c) Overview of diffusion models (1 Hr) d) Overview of Generative models (1 Hr) e) Exciting demo and Applications of Deep Learning (2 hour) 	<ul style="list-style-type: none"> a) Introduction to NLP (1 Hr) b) Overview of transformers (1 Hr) c) Demo (2 Hr) d) MISN research & opportunities (1 Hr) e) Career opportunities (1 Hr) f) Summary & resources (30 mins)