Lecture	Date	Duration (Hrs)	Topics Discussed	Resources
1	Jan 22nd 2024	1	Introduction of Course. Fundamentals	Lecture Notes
2	Jan 24th 2024	1	Classification, Clustering, Regression, Confusion Matrix	Lecture Notes
3	Jan 25th 2024	1	Machine Learning Basics	Lecture Notes
4	Jan 29th 2024	1	Introduction to DNN, weights and bias, matrix computation	Lecture Notes
5	Jan 31st 2024	1	Neuron, Hidden Layers, Activation Function	Lecture Notes
6	Feb 01st 2024	1	Linearity vs Non Linearity, OR gate	Lecture Notes
7	Fe 06th 2024	1.5 Hrs	Forward Propagation, Backward Propagation	Lecture Notes
8	Feb 07th 2024	1	Lab for Logic Gates, Back Propagation	Lecture Notes
9	Feb 12th 2024	1	Revsion of Online Class, Back Propagation	Lecture Notes
10	Feb 14th 2024	1	Back Propagation with numerical example	Lecture Notes
11	Feb 15th 2024	1	Intro to CNN, pooling, filters, paramaeters, convolution, types of filters, RELU	Lecture Notes
12	Feb 19th 2024	1	Intro to CNN, pooling, filters, paramaeters	Lecture Notes
13	Feb 21st 2024	1	CNN lab	Lecture Notes
14	Feb 22nd 2024	1	Overfitting, Dropout, Vanising Gradient Problem, Normalization, Resnet	Lecture Notes
15	Feb 26th 2024	1	Facenet Siamese Network, Triplet Loss	Lecture Notes
16	Feb 28th 2024	1	**Mid Exam**	
17	March 4th 2024	1	Inception Network	Lecture Notes
18	March 6th 2024	1	Object Classification. Intro to Yolo	Lecture Notes
19	March 11th 2024	1	Yolo	Lecture Notes
20	March 13th 2024	1	Yolo Lab	Lab
21	March 14th 2024	1	Sequence to Sequence Networks	Lecture Notes
22	March 16th 2024	1	RNN	Lecture Notes
23	March 18th 2024	1	RNN	Lecture Notes
24	March 19th 2024	1	LSTM	Lecture Notes
25	March 21st 2024	1	LSTM	Lecture Notes
26	March 25th 2024	1	Padding and Parameter Sharing in RNNs	Lecture Notes
27	March 27th 2024	1	GRU and Bi-RNN	Lecture Notes
28	March 28th 2024	1	Feature Representation	Lecture Notes

29	April 01st 2024	1	Learning Word Embeddings, Machine Translation using Encoder/Decoder	Lecture Notes
30	April 03rd	1	Mid Exam	
31	April 8th 2024			
32	April 15th		Guest Lecture	
33	April 17th		Transformers	
34	April 18th	1	Transformers Positional Encoding	Lecture Notes
35	April 22nd 2024	1	Transformers	
36	April 24th 2024	1	Auto Encoder	
37	April 29th 2024	1	Variaitonal Auto Encoder	
38	April 29th 2024	1	GANs	
39	May 2nd 2024	1	Deepfakes	
40	May 6th 2024	1	Introduction to Deep Reinforcement Learning	
41	May 8th 2024	1	Deep Reinfordement Learning. Value Based Learning	
42	May 9th 2024	1	Deep Reinfordement Learning. Policy Based Learning. LLMs	
43	May 14th 2024		Project Viva	