

Tentative Course Schedule						
#	Date	Lecture	Readings	HW#	HW Release	HW Deadline
1	04 / 12 / 02	Introduction to Deep learning & ML Review		HW1	05 / 01 / 30	05 / 02 / 18
2	04 / 12 / 04	MLP I (NNs, Universal approximator)				
3	05 / 01 / 15	MLP II (training NNs & Back-Propagation)				
4	05 / 01 / 22	Optimization I				
5	05 / 01 / 24	Optimization II				
6	05 / 01 / 29	Generalization				
7	05 / 01 / 31	Training techniques		HW2	05 / 02 / 19	05 / 03 / 08
8	05 / 02 / 05	CNN				
9	05 / 02 / 07	CNN Architectures & Visualzation	Quiz 1 (Lec 1-6)			
10	05 / 02 / 12	CNNs in Vision Problems (Segmentation, Object detection, ...)				
11	05 / 02 / 14	RNN I (RNN, LSTM)				
12	05 / 02 / 19	RNN II (Word embedding, language modeling, ...)		HW3	05 / 03 / 09	05 / 03 / 22
13	05 / 02 / 21	Attention & Transformer I				
14	05 / 02 / 26	Transformer II (BERT, T5, GPT, ViT, ...)	Quiz 2 (Lec 7-12)			
15	05 / 02 / 28	LLMs I				
16	05 / 03 / 02	LLMs II				
17	05 / 03 / 04	LLMs III		HW4	05 / 03 / 23	05 / 04 / 09
18	05 / 03 / 09	Recent State-space Models	Quiz 3 (Lec 13-16)			
19	05 / 03 / 11	Generative Models I (VAE)				
	05 / 03 / 16					
20	05 / 03 / 18	Generative Models II (GAN)				
21	05 / 03 / 23	Generative Models III (Diffusion Models)		HW5	05 / 04 / 10	Theoretical 05 / 04 / 16
22	05 / 03 / 25	Generative Models IV (Diffusion Models)				Practical 05 / 04 / 31
23	05 / 03 / 30	Generative Models V (Diffusion Models)				
24	05 / 04 / 01	Self-supervised Learning (Pretext tasks, contrastive learning)				
25	05 / 04 / 06	Text-image Foundation Models (CLIP, CLIP Properties, ...)	Quiz 4 (Lec 19-23)			
26	05 / 04 / 08	Text-to-image Foundation Models (DALL-E, ...)				
27		Graph Neural Networks (GNNs)				
28		Understanding Deep Networks I				
29		Understanding Deep Networks II				
	05 / 04 / 27	Final				