## CS280: Deep Learning

## Schedule and Syllabus

• Lecture hours: 15:00 - 16:40 Mon & Wed

• Location: Teaching Center 201

• Discussion sessions: TBA

Event	Date	Description	Course Materials	Assignments Quizzes
Lecture 1	Monday 07/09 Week 1	Course Introduction Deep learning overview Course logistics Machine Learning Basics	See Piazza	
Lecture 2	Wednesday 09/09 Week 1	Basic Neural Networks Single-layer networks		Quiz 1
Lecture 3	Monday 14/09 Week 2	Basic Neural Networks Multi-layer Perceptrons Forward and Bakcpropagation		A1 Out
Lecture 4	Wednesday 16/09 Week 2	Convolutional Neural Networks - I Convolution and pooling Equivariance		Quiz 2

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Lecture 5	Monday 21/09 Week 3	Convolutional Neural Networks - II Network Training Optimization		
Lecture 6	Wednesday 23/09 Week 3	Convolutional Neural Networks - III Network Training Regularization		Quiz 3
Lecture 7	Sunday 27/09 Week 3	Convolutional Neural Networks - IV CNN architectures		
Lecture 8	Monday 28/09 Week 4	CNN in Vision - I Semantic segmentation		
Lecutre 9	Wednesday 30/09 Week 4	CNN in Vision - II Object detection Object Segmentation		Quiz 4 A1 Due
National Days	Monday 05/10 Week 5	NO CLASS		A2 Out
National Days	Wednesday 07/10 Week 5	NO CLASS		

Event	Date	Description	Course Materials	Assignments Quizzes
Lecture 10	Monday 12/10 Week 6	CNN in Vision - III Visualizing and Understanding Interpretation		
Lecture 11	Wednesday 14/10 Week 6	CNN in Vision - IV Style Transfer Adversarial examples		Quiz 5
Lecture 12	Monday 19/10 Week 7	Recurrent Neural networks - I Sequence modeling, RNN BP Through Time		
Lecture 13	Wednesday 21/10 Week 7	Recurrent Neural Network - II LSTM, GRU Attention		Quiz 6 A2 Due
Lecture 14	Monday 26/10 Week 8	RNN in Vision and NLP Neural MT, Image caption		A3 Out
Lecture 15	Wednesday 28/10 Week 8	RNN in Vision and NLP More		Quiz 7
Lecture 16	Monday 2/11 Week 9	Transformers		Project Out
Lecture 17	Wednesday 4/11 Week 9	Graph Neural Networks		Quiz 8

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CVPR	Monday 9/11 Week 10	NO CLASS		
CVPR	Wednesday 11/11 Week 10	NO CLASS		A3 Due
CVPR	Monday 16/11 Week 11	NO CLASS		A4 Out
-	Wednesday 18/11 Week 11	Project Proposals		Proposal Due
Lecture 18	Monday 23/11 Week 12	Generative Models - I Latent variable models Autoencoder		
Lecture 19	Wednesday 25/11 Week 12	Generative Models - II Autoencoder, VAE		Quiz 9
Lecture 20	Monday 21/11 Week 13	Generative Models - III VAE & GAN I: Basics		
Lecture 21	Wednesday 26/11 Week 13	Generative Models - IV GAN II: GAN in vision		Quiz 10 A4 Due
Lecture 22	Monday 07/12 Week 14	Advanced Topics - I		

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Lecture 23	Wednesday 09/12 Week 14	Advanced Topics - I		Project Milestone
Lecture 24	Monday 14/12 Week 15	Advanced Topics - II		
Lecture 25	Wednesday 16/12 Week 15	Advanced Topics - II		
-	Week 16	Project		
-	Week 17	Project		
-	Week 18	Project Presentations Subject to Exam Schedule		Project Due