CS 4320: Machine Learning

Spring 2024 Schedule

Day	Topic	Reading	Work Due
Jan 9	•		
Jan 11			
W01	Introduction to Machine Learning		
W01	Working with data collections		
W01	Visualizing data		
H Jan. 15	Martin Luther King Jr. Day (no classes)		
Jan 16	Martin Lather King Jr. Day (no classes)		Assignment 1
Jan 18			Assignment 1
W02	Regression Models		
W02	Gradient Descent		
	Gradient Descent		
Jan 23			Assignment 2
Jan 25			
W03	Data Processing Pipelines		
W03	Intro to Neural Networks		
W03	Perceptrons		
W03	Multilayer Perceptrons		
W03	Back-propogation		
Jan 30			Assignment 3
Feb 1			
W04	Neural Networks with Tensorflow and Keras		
W04	Classification		
W04	Performance Measures/Confusion Matrix		
W04	Decision Trees		
Feb 6			Assignment 4
Feb 8			<u> </u>
W05	Cross-Validation		
W05	Bias vs Variance		
W05	Error Analysis		
W05	Loss Functions		
W05	Regularization		
W05	Learning Curves		
Feb 13	J		A 1
Feb 15			Assignment 5
W06	Urman navamatan agarahas		
W06	Hyper-parameter searches Support Vector Machines		
H Feb. 19	President's Day (no classes)		
Feb 20			Assignment 6
Feb 22			
W07	Ensembles		
W07	Forests		
W07	Boosting		
W07	Neural Networks for Classification		
Feb 27			Assignment 7
Feb 29			
W08	Action Policies		
W08	Value Iteration		
W08	Markov Chains		

W08	Markov Decision Process	
W08	Q-Values	
W08	Temporal Difference Learning	
Mar 5		Assignment 8
Mar 7		
W09	Temporal Difference Q-Learning	
H Mar 11-15	Spring Break (no classes)	
Mar 19		Assignment 9
Mar 21		
W10	Neural Networks	
W10		
Mar 26		Assignment 10
Mar 28		
W11	Neural Networks	
W11		
Apr 2		Assignemnt 11
Apr 4		
W12	Neural Networks	
W12		
Apr 9		Assignment 12
Apr 11		
W13	Neural Networks	
W13		
Apr 16		Assignment 13
Apr 18		
W14	Neural Networks	
W14		
Apr 23		Assignment 14
W15	Neural Networks	
W15		
Apr 25	Last Day of Classes	
Apr 26	Reading Day (no classes)	
		Assignment 15
Apr 30	Final Exam 9:00 am - 10:50 am	Final Exam

Class announcements may modify schedule from that listed above.