_		T	_		1
Day	Topic	Slides	Events	Deadlines	
		1			
	[Introduction (Chelsea)]				
	What is this class about?				
Mon Apr 6	Overview of course	[one page]	[foundations (zip) (template)] out		
			1		
(week 1)	Optimization	[text outline]	1		
		[pdf:1pp,6pp]	1		
		[code]	1		
		[supplementary]			
	for the test of the N		T	T	
	[Machine learning (Chelsea)]				
	Don't manually code it up, learn it from examples	_			
Wed Apr 8	Linear classification	[one page]			
wea Apr o	Loss minimization	[text outline]	†		
	Stochastic gradient descent	[pdf:1pp,6pp]	+		
	Stochastic gradient descent	[code]	†		
		[supplementary]	†		
Thu Apr 9	Section: optimization, probability, Python (review)	[slides]			
Mon Apr 13	Features and non-linearity	[one page]	[sentiment (zip) (template)] out		
. 102		, Sinc pager			
(week 2)	Neural networks, nearest neighbors	[text outline]	†		
,		[pdf:1pp,6pp]	†		
		[supplementary]	1		
Tue Apr 14				[foundations (zip) (template)] due	
Wed Apr 15	Generalization	[one page]			
	Unsupervised learning, K-means	[text outline]			
		[pdf:1pp,6pp]			
		[code]			
		[supplementary]	1		
Thu Apr 16	Section: Backpropagation, nearest neighbors and past exam problems	[slides]			
		[annotated slides]			
	[Search (Nima)]				
	Problem solving as finding paths in graphs				
Mon Apr 20	Tree search	[one page]	[reconstruct (zip) (template)] out	_	
(week 3)	<u>Dynamic programming, uniform cost search</u>	[text outline]	p-proposal (survey) out		
		[pdf:1pp,6pp]		_	
		[code]		_	
T 4		[supplementary]	+	for the second of the second o	
Tue Apr 21	A # Constitution   Description	f 2	+	[sentiment (zip) (template)] due	
Wed Apr 22	A*, consistent heuristics	[one page]	+		
	Relaxation	[text outline] [pdf:1pp,6pp]	+		
			+		
		[code]	1		
Thu 4 22	Soction LICS Dynamic Dra	[supplementary]			
Thu Apr 23	Section: UCS, Dynamic Programming, A*	[slides]			
		[annotated slides]	1		
		[annotated slides]	1	I.	1
	[Markov decision processes (Chelsea)]				
		7			
	When nature intervenes randomly	1			
Fri Apr 24	,		Drop date		
Mon Apr 27	MDPs, policy evaluation, value iteration	[one page]	[blackjack (zip) (template)] out		
1			1		
(week 4)		[text outline]	1		
		[pdf:1pp,6pp]	1		
		[code]	1		
	⊣	[supplementary]	1		
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Tue Apr 28		[Supplemental y]		[reconstruct (zip) (template)] due	
Tue Apr 28 Wed Apr 29	Reinforcement learning	[one page]		[reconstruct (zip) (template)] due	
	Reinforcement learning Monte Carlo, SARSA, Q-learning			[reconstruct (zip) (template)] due	
		[one page]		[reconstruct (zip) (template)] due	

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Th A 20	Casting MDD and Dainfarrance Lauring	[supplementary]			
Thu Apr 30	Section: MDPs and Reinforcement Learning	[slides]		p-proposal (survey) due	
	[Game playing (Nima)]				
	[come propriet				
	When an adversary intervenes				
Mon May 4	Minimax, expectimax	[one page]	[pacman (zip) (template)] out		
(week 5)	Evaluation functions	[text outline]	+		
	Alpha-beta pruning	[pdf:1pp,6pp]	1		
		[code] [supplementary]	+		
Tue May 5		<u>Isupplementary</u>		[blackjack (zip) (template)] due	
Wed May 6	TD learning	[one page]		[Diackjack (Zip) (template)] due	
, -	Game theory	[text outline]	†		
		[pdf:1pp,6pp]	†		
		[supplementary]	1		
Thu May 7	Section: Games	[slides]			
		T			
	[Constraint satisfaction problems (Nima)]				
Mon Mov 11	Problem solving as assigning variables (with constraints) Factor graphs	[one negal	[schoduling (zin) /tomplete\]t		1
Mon May 11 (week 6)	Backtracking search	[one page] [text outline]	[scheduling (zip) (template)] out	4	-
( -veek of	Dynamic ordering, arc consistency	[pdf:1pp,6pp]	p-progress out	+	
	synamic ordering, are consistency	[demo]		†	
		[supplementary]		1	
Tue May 12				[pacman (zip) (template)] due	1
Wed May 13	Beam search, local search	[one page]			
	Conditional independence, variable elimination	[text outline]			
		[pdf:1pp,6pp]	1		
		[supplementary]			
Thu May 14	Section: CSPs	[slides]			
		[annotated slides]			
	[Payasian naturarks (Nima)]				
	[Bayesian networks (Nima)]				
	Representing uncertainty with probabilities	[one page]	[car (zip) (template)] out		
		[one page] [text outline]	[car (zip) (template)] out [logic (zip) (template)] out	-	
Mon May 18	Representing uncertainty with probabilities  Probabilistic inference				
Mon May 18	Representing uncertainty with probabilities  Probabilistic inference	[text outline]			
Mon May 18 (week 7) Tue May 19	Representing uncertainty with probabilities  Probabilistic inference  Hidden Markov models	[pdf:1pp,6pp] [supplementary]		[scheduling (zip) (template)] due	
Mon May 18 (week 7)	Representing uncertainty with probabilities Probabilistic inference Hidden Markov models  Forward-backward	[text outline] [pdf:1pp,6pp] [supplementary] [one page]		[scheduling (zip) (template)] due	
Mon May 18 (week 7) Tue May 19	Representing uncertainty with probabilities Probabilistic inference Hidden Markov models  Forward-backward Particle filtering	[text outline] [pdf:1pp,6pp] [supplementary]  [one page] [text outline]		[scheduling (zip) (template)] due	
Mon May 18 (week 7) Tue May 19	Representing uncertainty with probabilities Probabilistic inference Hidden Markov models  Forward-backward	[text outline] [pdf:1pp,6pp] [supplementary]  [one page] [text outline] [pdf:1pp,6pp]		[scheduling (zip) (template)] due	
Mon May 18 (week 7) Tue May 19 Wed May 20	Representing uncertainty with probabilities  Probabilistic inference  Hidden Markov models  Forward-backward  Particle filtering  Gibbs sampling	[text outline] [pdf:1pp,6pp] [supplementary]  [one page] [text outline] [pdf:1pp,6pp] [supplementary]			
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Mon May 18 (week 7) Tue May 19 Wed May 20 Thu May 21 Mon May 25	Representing uncertainty with probabilities  Probabilistic inference  Hidden Markov models  Forward-backward  Particle filtering  Gibbs sampling  Section: Bayesian networks	[text outline] [pdf:1pp,6pp] [supplementary]  [one page] [text outline] [pdf:1pp,6pp] [supplementary] [slides]		p-progress due  [car (zip) (template)] due	
Mon May 18 (week 7)  Tue May 19  Wed May 20  Thu May 21  Mon May 25  (week 8)  Tue May 26	Representing uncertainty with probabilities  Probabilistic inference  Hidden Markov models  Forward-backward  Particle filtering  Gibbs sampling  Section: Bayesian networks  (Memorial Day — no class)	[text outline] [pdf:1pp,6pp] [supplementary]  [one page] [text outline] [pdf:1pp,6pp] [supplementary] [slides] [annotated slides]		p-progress due	
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		[supplementary]			
Tue Jun 2			Exam		
Wed Jun 3	First-order logic	[one page]			
	Resolution	[text outline]			
		[pdf:1pp,6pp]			
		[supplementary]			
	[Conclusion (Chelsea)]				
	[Conclusion (Chelsea)]  Reflections and prospects				
		[one page]		p-final due	
Mon Jun 8	Reflections and prospects	[text outline]		p-final due	
Mon Jun 8 (week 10)	Reflections and prospects Deep learning			p-final due	