



UC Berkeley CS188 Intro to AI -- Course Materials

[Home](#) [Course Schedule](#) [Lectures](#) [Homework](#) [Pacman Projects](#) [Exams](#) [Instructor's Guide](#) [Student's Guide](#) [More AI Courses](#) [Contact](#)

Recommended Lecture Videos

We recommend watching the following set of lecture videos:

	Lecture Title	Lecturer	Semester
Lecture 1	Introduction	Dan Klein	Fall 2012
Lecture 2	Uninformed Search	Dan Klein	Fall 2012
Lecture 3	Informed Search	Dan Klein	Fall 2012
Lecture 4	Constraint Satisfaction Problems I	Dan Klein	Fall 2012
Lecture 5	Constraint Satisfaction Problems II	Dan Klein	Fall 2012
Lecture 6	Adversarial Search	Dan Klein	Fall 2012
Lecture 7	Expectimax and Utilities	Dan Klein	Fall 2012
Lecture 8	Markov Decision Processes I	Dan Klein	Fall 2012
Lecture 9	Markov Decision Processes II	Dan Klein	Fall 2012
Lecture 10	Reinforcement Learning I	Dan Klein	Fall 2012
Lecture 11	Reinforcement Learning II	Dan Klein	Fall 2012
Lecture 12	Probability	Pieter Abbeel	Spring 2014
Lecture 13	Markov Models	Pieter Abbeel	Spring 2014
Lecture 14	Hidden Markov Models	Dan Klein	Fall 2013
Lecture 15	Applications of HMMs / Speech	Pieter Abbeel	Spring 2014
Lecture 16	Bayes' Nets: Representation	Pieter Abbeel	Spring 2014
Lecture 17	Bayes' Nets: Independence	Pieter Abbeel	Spring 2014
Lecture 18	Bayes' Nets: Inference	Pieter Abbeel	Spring 2014
Lecture 19	Bayes' Nets: Sampling	Pieter Abbeel	Fall 2013
Lecture 20	Decision Diagrams / Value of Perfect Information	Pieter Abbeel	Spring 2014
Lecture 21	Machine Learning: Naive Bayes	Nicholas Hay	Spring 2014
Lecture 22	Machine Learning: Perceptrons	Pieter Abbeel	Spring 2014
Lecture 23	Machine Learning: Kernels and Clustering	Pieter Abbeel	Spring 2014
Lecture 24	Advanced Applications: NLP, Games, and Robotic Cars	Pieter Abbeel	Spring 2014
Lecture 25	Advanced Applications: Computer Vision and Robotics	Pieter Abbeel	Spring 2014

Additionally, there are additional Step-By-Step videos which supplement the lecture's materials. These videos are listed below:

	Lecture Title	Lecturer	Notes
SBS-1	DFS and BFS	Pieter Abbeel	Lec: Uninformed Search
SBS-2	A* Search	Pieter Abbeel	Lec: Informed Search
SBS-3	Alpha-Beta Pruning	Pieter Abbeel	Lec: Adversarial Search
SBS-4	D-Separation	Pieter Abbeel	Lec: Bayes' Nets: Independence
SBS-5	Elimination of One Variable	Pieter Abbeel	Lec: Bayes' Nets: Inference
SBS-6	Variable Elimination	Pieter Abbeel	Lec: Bayes' Nets: Inference
SBS-7	Sampling	Pieter Abbeel	Lec: Bayes' Nets: Sampling
SBS-8	Maximum Likelihood	Pieter Abbeel	Lec: Machine Learning: Naive Bayes
SBS-9	Laplace Smoothing	Pieter Abbeel	Lec: Machine Learning: Naive Bayes
SBS-10	Perceptrons	Pieter Abbeel	Lec: Machine Learning: Perceptrons

Per-Semester Video Archive

The lecture videos from the most recent offerings of CS188 are posted below.

[Spring 2014 Lecture Videos](#)

[Fall 2013 Lecture Videos](#)

[Spring 2013 Lecture Videos](#)

[Fall 2012 Lecture Videos](#)

Spring 2014

	Lecture Title	Lecturer	Notes
Lecture 1	Introduction	Pieter Abbeel	
Lecture 2	Uninformed Search	Pieter Abbeel	
Lecture 3	Informed Search	Pieter Abbeel	
Lecture 4	Constraint Satisfaction Problems I	Pieter Abbeel	Recording is a bit flaky, see Fall 2013 Lecture 4 for alternative
Lecture 5	Constraint Satisfaction Problems II	Pieter Abbeel	
Lecture 6	Adversarial Search	Pieter Abbeel	
Lecture 7	Expectimax and Utilities	Pieter Abbeel	
Lecture 8	Markov Decision Processes I	Pieter Abbeel	
Lecture 9	Markov Decision Processes II	Pieter Abbeel	
Lecture 10	Reinforcement Learning I	Pieter Abbeel	
Lecture 11	Reinforcement Learning II	Pieter Abbeel	
Lecture 12	Probability	Pieter Abbeel	
Lecture 13	Markov Models	Pieter Abbeel	
Lecture 14	Hidden Markov Models	Pieter Abbeel	Recording is a bit flaky, see Fall 2013 Lecture 18 for alternative
Lecture 15	Applications of HMMs / Speech	Pieter Abbeel	
Lecture 16	Bayes' Nets: Representation	Pieter Abbeel	
Lecture 17	Bayes' Nets: Independence	Pieter Abbeel	
Lecture 18	Bayes' Nets: Inference	Pieter Abbeel	
Lecture 19	Bayes' Nets: Sampling	Pieter Abbeel	Unrecorded, see Fall 2013 Lecture 16
Lecture 20	Decision Diagrams / Value of Perfect Information	Pieter Abbeel	
Lecture 21	Machine Learning: Naive Bayes	Nicholas Hay	
Lecture 22	Machine Learning: Perceptrons	Pieter Abbeel	
Lecture 23	Machine Learning: Kernels and Clustering	Pieter Abbeel	
Lecture 24	Advanced Applications: NLP, Games, and Robotic Cars	Pieter Abbeel	
Lecture 25	Advanced Applications: Computer Vision and Robotics	Pieter Abbeel	
Lecture 26	Conclusion	Pieter Abbeel	Unrecorded

Fall 2013

	Lecture Title	Lecturer	Notes
Lecture 1	Introduction	Dan Klein	
Lecture 2	Uninformed Search	Dan Klein	
Lecture 3	Informed Search	Dan Klein	
Lecture 4	Constraint Satisfaction Problems I	Dan Klein	
Lecture 5	Constraint Satisfaction Problems II	Dan Klein	
Lecture 6	Adversarial Search	Dan Klein	
Lecture 7	Expectimax and Utilities	Dan Klein	
Lecture 8	Markov Decision Processes I	Dan Klein	

Lecture 9	Markov Decision Processes II	Dan Klein	
Lecture 10	Reinforcement Learning I	Dan Klein	
Lecture 11	Reinforcement Learning II	Dan Klein	
Lecture 12	Probability	Pieter Abbeel	
Lecture 13	Bayes' Nets: Representation	Pieter Abbeel	
Lecture 14	Bayes' Nets: Independence	Dan Klein	
Lecture 15	Bayes' Nets: Inference	Pieter Abbeel	
Lecture 16	Bayes' Nets: Sampling	Pieter Abbeel	
Lecture 17	Decision Diagrams / Value of Perfect Information	Pieter Abbeel	
Lecture 18	Hidden Markov Models	Dan Klein	
Lecture 19	Applications of HMMs / Speech	Dan Klein	
Lecture 20	Machine Learning: Naive Bayes	Dan Klein	
Lecture 21	Machine Learning: Perceptrons	Dan Klein	
Lecture 22	Machine Learning: Kernels and Clustering	Pieter Abbeel	
Lecture 23	Machine Learning: Decision Trees and Neural Nets	Pieter Abbeel	
Lecture 24	Advanced Applications: NLP and Robotic Cars	Dan Klein	Unrecorded, see Spring 2013 Lecture 24
Lecture 25	Advanced Applications: Computer Vision and Robotics	Pieter Abbeel	
Lecture 26	Conclusion	Dan Klein, Pieter Abbeel	Unrecorded

Spring 2013

	Lecture Title	Lecturer	Notes
Lecture 1	Introduction	Pieter Abbeel	Video Down
Lecture 2	Uninformed Search	Pieter Abbeel	
Lecture 3	Informed Search	Pieter Abbeel	
Lecture 4	Constraint Satisfaction Problems I	Pieter Abbeel	
Lecture 5	Constraint Satisfaction Problems II	Pieter Abbeel	Unrecorded, see Fall 2012 Lecture 5
Lecture 6	Adversarial Search	Pieter Abbeel	
Lecture 7	Expectimax and Utilities	Pieter Abbeel	
Lecture 8	Markov Decision Processes I	Pieter Abbeel	
Lecture 9	Markov Decision Processes II	Pieter Abbeel	
Lecture 10	Reinforcement Learning I	Pieter Abbeel	
Lecture 11	Reinforcement Learning II	Pieter Abbeel	
Lecture 12	Probability	Pieter Abbeel	
Lecture 13	Bayes' Nets: Representation	Pieter Abbeel	
Lecture 14	Bayes' Nets: Independence	Pieter Abbeel	
Lecture 15	Bayes' Nets: Inference	Pieter Abbeel	
Lecture 16	Bayes' Nets: Sampling	Pieter Abbeel	
Lecture 17	Decision Diagrams / Value of Perfect Information	Pieter Abbeel	
Lecture 18	Hidden Markov Models	Pieter Abbeel	
Lecture 19	Applications of HMMs / Speech	Pieter Abbeel	
Lecture 20	Machine Learning: Naive Bayes	Pieter Abbeel	
Lecture 21	Machine Learning: Perceptrons I	Nicholas Hay	
Lecture 22	Machine Learning: Perceptrons II	Pieter Abbeel	
Lecture 23	Machine Learning: Kernels and Clustering	Pieter Abbeel	
Lecture 24	Advanced Applications: NLP and Robotic Cars	Pieter Abbeel	
Lecture 25	Advanced Applications: Computer Vision and Robotics	Pieter Abbeel	
Lecture 26	Conclusion	Pieter Abbeel	Unrecorded

	Lecture Title	Lecturer	Notes
Lecture 1	Introduction	Dan Klein	
Lecture 2	Uninformed Search	Dan Klein	
Lecture 3	Informed Search	Dan Klein	
Lecture 4	Constraint Satisfaction Problems I	Dan Klein	
Lecture 5	Constraint Satisfaction Problems II	Dan Klein	
Lecture 6	Adversarial Search	Dan Klein	
Lecture 7	Expectimax and Utilities	Dan Klein	
Lecture 8	Markov Decision Processes I	Dan Klein	
Lecture 9	Markov Decision Processes II	Dan Klein	
Lecture 10	Reinforcement Learning I	Dan Klein	
Lecture 11	Reinforcement Learning II	Dan Klein	
Lecture 12	Probability	Pieter Abbeel	
Lecture 13	Bayes' Nets: Representation	Pieter Abbeel	
Lecture 14	Bayes' Nets: Independence	Pieter Abbeel	
Lecture 15	Bayes' Nets: Inference	Pieter Abbeel	
Lecture 16	Bayes' Nets: Sampling	Pieter Abbeel	
Lecture 17	Decision Diagrams / Value of Perfect Information	Pieter Abbeel	
Lecture 18	Hidden Markov Models	Pieter Abbeel	
Lecture 19	Applications of HMMs / Speech	Dan Klein	
Lecture 20	Machine Learning: Naive Bayes	Dan Klein	
Lecture 21	Machine Learning: Perceptrons	Dan Klein	
Lecture 22	Machine Learning: Kernels and Clustering	Dan Klein	
Lecture 23	Machine Learning: Decision Trees and Neural Nets	Pieter Abbeel	
Lecture 24	Advanced Applications: Computer Vision and Robotics	Pieter Abbeel	
Lecture 25	Advanced Applications: NLP and Robotic Cars	Dan Klein, Pieter Abbeel	Unrecorded
Lecture 26	Conclusion	Dan Klein, Pieter Abbeel	Unrecorded