**CAP 4630 schedule**

Lecture 1 (8/22) Mathematical proofs and Python

Lecture 2 (8/24) Uninformed search (RN 3.1-3.4)

Lecture 3 (8/29) Informed search (RN 3.5-3.7)

Lecture 4 (8/31) Local search (RN chapter 4)

Lecture 5 (9/5) Adversarial search (RN chapter 5) (HW1 out due 10/3)

Lecture 6 (9/19) Constraint satisfaction (RN chapter 6)

Lecture 7 (9/21) Propositional logic (RN chapter 7)

Lecture 8 (9/26) First-order logic (RN chapter 8)

Lecture 9 (9/28) Logical inference (RN chapter 9)

Lecture 10 (10/3) Integer optimization (Jensen chapters 7-8)

Lecture 11 (10/5) Linear optimization (Jensen chapters 2-3) (HW2 out due 10/18)

Lecture 12 (10/10) Nonlinear optimization (Jensen chapters 9-10)

Lecture 13 (10/12) Classical planning (RN chapter 10)

Lecture 14 (10/17) Spatial planning (RN chapter 25)

Lecture 15 (10/19) Midterm review

Lecture 16 (10/24) Midterm exam

Lecture 17 (10/26) Bayesian networks (RN chapter 14)

Lecture 18 (10/31) Hidden Markov models (RN chapter 15) (HW3 out due 11/14)

Lecture 19 (11/2) Markov decision processes (RN chapter 16)

Lecture 20 (11/7) 3-player Kuhn poker project (Final project out due 12/7)

Lecture 21 (11/9) Multiagent decision making (RN chapter 17)

Lecture 22 (11/14) Reinforcement learning (RN chapter 21) (HW4 out due 11/28)

Lecture 23 (11/16) Natural language processing (RN chapter 22)

Lecture 24 (11/21) Classification (RN chapter 18.1-18.5)

Lecture 25 (11/28) Regression (RN chapter 18.6)

Lecture 26 (11/30) Clustering (RN chapter 20.3)

Lecture 27 (12/5) Deep learning (RN chapter 18.7)

Lecture 28 (12/7) Project presentations

Lecture 29 (12/14) Final Exam