Please complete your "course evaluation" now – thanks!

Course Evaluation

- ## Access your evaluation form by
    - opening up an email from c-evals@usc.edu or
    - following a link in Blackboard under "Course Evaluations" tab.

Learning Experience Evaluations are your opportunity to provide feedback to your instructor. USC and its faculty take these evaluations very seriously, as they provide valuable information that faculty and schools can use to improve teaching. It is important to remember that the learning process is collaborative and requires significant effort from the instructor, individual students, and the class as a whole. Please provide a thoughtful assessment of their experience, as well as of their own effort, with comments focused on specific aspects of instruction or the course.

Evaluations for Viterbi classes are augmented by what were previously the summative Questions 11 & 12:

11. Overall, how would you rate this instructor?

12. Overall, how would you rate this course?

Topics covered by the final exam

1. Probabilistic inference using joint distribution – Lecture 9a
   - Prior, posterior, marginal, normalization, conditional independence

2. Bayes' Rule – Lecture 9a
   - Understand how to apply the Bayes' rule (Quiz 4)

3. Bayesian Network – lecture 9b
   - Understand how to compute full joint distribution (Quiz 5)

4. Exact Inference in Bayesian Networks – Lecture 11a
   - Understand how to conduct inference by enumeration (Quiz 6)

5. Decision Making – Lecture 11b
   - Understand how to compute the expected utility (EU)
   - Understand how to make simple decisions (oil drilling example in Lecture 11b)

6. MDP – Lecture 13a
   - Interest rate/discount factor, short-term reward R(s), long-term utility U(s)
   - Given policy, compute U(s); Given U(s), compute policy (Quiz 9)
   - Bellman equation, value iteration, policy iteration

7. Decision Tree Learning – Lecture 13b
   - Understand the semantics of a decision tree
   - Understand entropy, and information gain (Quiz 10)

8. Perceptron and Neural Network Learning – Lecture 14a, 14b
   - Understand the two ways of minimizing L2 (hand calculation, gradient descent)
   - Understand the capability of a perceptron: can it represent Boolean functions? (Quiz 11)
   - NN training algorithm: back-propagation (Quiz 12)

9. Statistical learning – Lecture 15a
   - Bayesian learning (candy shop example)
   - Understand how to use the learned naïve Bayesian model (Quiz 13)

10. Reinforcement learning – Lecture 15b
    - Direct utility estimation, adaptive dynamic programming, temporal-difference learning
    - Q-learning