Strategy-proof Machine Learning

Reading Questions for Wednesday, March 23, 2016

We ask you to submit comments on the following paper by midnight Tuesday March 22:


Your comments should include both answers to the specific reading questions and generic response about the papers. You are welcome to include any questions you have about the papers in your comments. After submitting your own comments, you’ll be able to see others’ submitted comments. You can comment on others’ submissions and answer raised questions on Canvas. Discussion on Canvas is strongly encouraged.

1 Reading Questions

1. What are the two domain restrictions in this paper? Why do authors restrict the problem in these two domains and which domain do you think is more practical?

2. Why would people lie if we just use a standard classification algorithm? Based on the analysis, can you explain why mechanism 1 (PM) is strategyproof?

3. What is the difference between decision theoretic and learning theoretic? How does the difference influence the property of strategyproof and classification accuracy (in the setting of binary function and shared input respectively)?

2 Generic Response

Respond to the papers following the guidelines in the course syllabus (under “Submit Comments and Presenting Papers”).