

Prediction Markets and Market Scoring Rules

Reading Questions for Monday, February 22, 2016

We ask you to submit comments on the following paper by midnight Sunday February 21:

- The Multiplicative Weights Update Method (Links to an external site.), S. Arora, E. Hazan and S. Kale. Theory of Computing, vol. 8, pp. 121-164, 2012. (Read Sections 1, 2, 3.1 and 3.8 , 3.9. and 4. The rest is optional.)

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. It is often said that the multiplicative weights algorithm performs well in an *adversarial* setting. Briefly explain what this means.
2. In online convex optimization, what is the *regret* of an online algorithm? Do you think regret is a good metric for measuring an online algorithm's performance? Why or why not?

2 Generic Response

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