COMPSCI/ECON 206

Computational Microeconomics

2022 Spring Term (Seven Week - Second)



Final Project: The Future of Computational Economics

Create your final project in the private GitHub repository that I shared privately with you in the CSEcon GitHub organization: https://github.com/CSEcon.

Please check duplications and revise iteratively. (Sakai-Week 6-7-FinalProject Turnitin)

1. Grades Breakdown

Part I: The polished version of Problem Sets and Code Assignments 1-2: 5%

(Due Sunday, May 1, 11:00 P.M.)

Part II: Final project peer evaluations: 5%

(Due Tuesday, May 3 in class (oral), Wednesday, May 4, 11:00 P.M. written (in email))

Part III: Final project presentations and Q&A: 10%

(Due Thursday, May 5, in class)

Part IV: Final project: 10%

(Due Sunday, May 8, 11:00 P.M.)

2. Templates and Resources

https://github.com/CSEcon/Spring2022FinalProject

3. Content Explanation and Scaffolding Resources

Pick one recent article on **auction** and **voting** (non-survey or SoK) and complete the article of "comments" in the Markdown templates with required supplementary materials and code.

Where to find an article? (*Hints and Scaffolding Resources*)

■ Method 1: You can pick one article in a recent survey or SoK

e.g.

- 1. When Blockchain Meets Auction Models: A Survey, Some Applications, and Challenges https://arxiv.org/abs/2110.12534
- 2. A Survey of Blockchain-Based on E-voting Systems: https://dl.acm.org/doi/abs/10.1145/3376044.3376060
- 3. Survey on Blockchain-Based Electronic Voting https://link.springer.com/chapter/10.1007/978-3-030-29035-1_54
- 4. The Application of the Blockchain Technology in Voting Systems: A Review https://dl.acm.org/doi/abs/10.1145/3439725
- 5. A Systematic Literature Review on Blockchain Governance https://arxiv.org/abs/2105.05460

■ Method 2: You can pick one research article directly by google scholar search *e.g.*:

1. Proof of Vote: A High-Performance Consensus Protocol Based on Vote Mechanism & Consortium Blockchain

https://ieeexplore.ieee.org/abstract/document/8291964

2. Voting-Based Decentralized Consensus Design for Improving the Efficiency and Security of Consortium Blockchain

https://ieeexplore.ieee.org/abstract/document/9219122

- 3. Weighted voting on the blockchain: Improving consensus in proof of stake protocols https://onlinelibrary.wiley.com/doi/abs/10.1002/nem.2093
- 4. Always on Voting: A Framework for Repetitive Voting on the Blockchain https://arxiv.org/abs/2107.10571
- 5. Towards a systematic understanding of blockchain governance in proposal voting: A dash case study

https://www.sciencedirect.com/science/article/pii/S2096720922000264

6. Voting Process with Blockchain Technology: Auditable Blockchain Voting System

https://link.springer.com/chapter/10.1007/978-3-319-98557-2 21