

Machine Learning and Economics Reading Group

Organizing meeting

Maximilian Kasy

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Reading group versus lecture

- **Lecture** “Foundations of Machine Learning:”
 - Self-contained but technical introduction to machine learning (ML).
 - Focus on conceptual foundations.
 - Less emphasis on economics.
 - Open for auditing.
- **Reading group** “Economics and machine learning:”
 - *Not* an introduction to ML.
 - Focus on the intersection with economics (theoretical and applied).
 - Emphasis on the social impact of ML, and non-commercial applications.
 - Goal: Joint development of research agendas.

Logistics for the reading group

- Bi-weekly meetings in even weeks of the term, starting in HT.
- Two paired readings for every meeting.
 1. Technical.
 2. Critical / big picture.
- One volunteer is responsible for presenting each paper. (ca. 15 minutes).
- **Signup:** Second Tab of ML & ECON - GOOGLE SHEETS
- Second half of each meeting:
 - Open discussion.
 - Development of research questions.

Readings for HT 2022

- W2
 - Introduction of Understanding machine learning: From theory to algorithms
 - Roles for Computing in Social Change
- W4
 - Learning Equilibria in Matching Markets from Bandit Feedback
 - Digital Socialism?
- W6
 - The Limits of Price Discrimination
 - AI's Future Doesn't Have to Be Dystopian
- W8
 - Chapters 1-3 of The Algorithmic Foundations of Differential Privacy
 - Democratic Data: A Relational Theory For Data Governance

Links to all readings are on the group website.

Going forward

- I hope to make this reading group a regular institution for future terms.
- I'd appreciate input and suggestions for future paired readings (starting TT).
- I'd also appreciate any suggestions about other possible activities in the context of this group.
- As a reminder: we will meet
 - 2:30pm on Tuesdays; Jan 25, Feb 8, Feb 22, March 8.
 - Manor Road Building, Seminar Room A.

Thank you!