Applications of ML in Finance

§ Name of instructor
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Short Description:

This course offers an exploration of cutting-edge applications of machine learning (ML) in the financial industry. Participants will start by analyzing a research paper with Marcos on hybrid machine learning algorithms used to assess customer risk-adjusted revenue, providing insights into advanced ML techniques and their practical implications in finance. Next, Joerg and Marcos will lead a discussion on a second paper focused on the benefits of machine learning tools for consumers without credit history, highlighting the transformative potential of ML in expanding financial inclusivity. The course will conclude with a tutorial and exercise session led by Wouter and Marcos, allowing participants to apply their knowledge through practical, hands-on activities, reinforcing the theoretical concepts covered.

Topics include:

1. Analysis of Paper 1: Applying hybrid machine learning algorithms to assess customer risk-adjusted revenue in the financial industry (Marcos)
2. Analysis of Paper 2: How can Consumers Without Credit History Benefit from the Use of Information Processing and Machine Learning Tools by Financial Institutions? (Joerg/Marcos)
3. Tutorial/Exercise Session (Wouter/Marcos)

Facilities/Materials required:

- https://www.anaconda.com/
- https://jupyter.org/
- https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4730445
- https://www.sciencedirect.com/science/article/abs/pii/S1567422322000850