

Marketing Colloquia

2021 Fall

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Thursday, November 18, 2021

741 JMHH

12:00 PM to 1:10 PM

Zoom: <https://upenn.zoom.us/j/98520193752>:

HOW RECOMMENDATION SYSTEM FEEDBACK LOOPS DISPROPORTIONATELY HURT USERS WITH MINORITY PREFERENCES

ABSTRACT: Algorithmic recommendation systems impact the choices of millions of consumers daily; these systems exist for a wide variety of markets, including both consumable and durable goods, as well as digital and physical goods. After a recommendation system is in place, it will need to be periodically updated to incorporate new users, new items, and new observed interactions between users and items. These observed data, however, are algorithmically confounded: they are the result of a feedback loop between human choices and the existing algorithmic recommendation system. Using simulations, we explore the impact of updating a recommendation system. We find that the choices surrounding system updates have the greatest impact on users belonging to minority preference segments.