



Recommendation Systems:

Do systems match our preferences or do our preferences adapt to the recommendations?

Project Description We seek to build a live recommendation platform in which we may evaluate recommendation systems based on user behavior. Users will be presented with recommendations from state-of-the-art and baseline models, as well as random items. As they interact with the system over time, the models will construct representations of the users' preferences which will be used to provide personalized recommendations. The objective of this study is to understand the impact of recommendation systems on users.

- Do users click on recommended items more than random items? Does it matter if they are labeled as recommended or explained in other ways (e.g., "Because you liked...")?
- If a user is exposed only to a state-of-the-art system (no other recommendations), does the variety in what they consume change? Is there a change in their explicit feedback?
- Explicit feedback: Which set of items does a user prefer (and to what degree)? How much do users value diversity in recommended items? How satisfied are users with recommended items?

Position Description We seek a student who has web development experience, as their primary role would be to assist in developing the live recommendation platform, including adapting offline recommendation systems into this system. This is an opportunity to gain exposure to research involving machine learning and user studies, and to be second author on directly related publications.

Collaborators This project is lead by Allison Chaney, a Princeton Computer Science PhD candidate and student of David Blei, professor of Statistics and Computer Science at Columbia.

Contact Allison Chaney [achaney@cs.princeton.edu] with questions or to submit your CV/resume for consideration.