## Experience-Driven Peer Effects: Evidence from a Large Natural Experiment

William Cai, Johan Ugander Stanford University

## **Motivation**

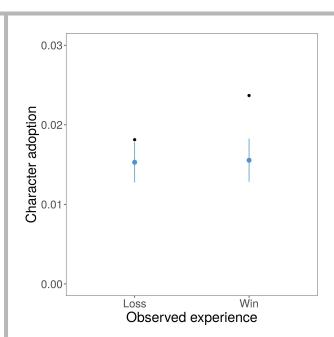
- Many important behaviors spread via person-to-person social interactions.
- It's not clear the role, if any, that observed experience plays, and how it interacts with observed behavior.

## **Data**

- We use gameplay records from a popular video game, League of Legends, to disentangle the effects of observed peer experience & behavior.
- We exploit variation in the character selection phase to conduct a natural experiment.

## **Experience Driven Peer Effects**

- We observe peer effects: players are more likely to adopt a character if they observe it in their previous game.
- Further, the effect is higher when the player observes the character win (see figure).
- Implications for platform/intervention design: important to broadcast positive experiences users have with desirable behavior.



The black dot is a measure of how often players adopt the observed character, while the blue is its expected value under the null. Observing a positive experience (right) results in more adoption than a negative experience (left).