ECONOMICS OF DIGITIZATION APPLICATION

CONTACT INFORMATION

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ACADEMIC INFORMATION

I am currently a 3rd Year student at New York University. My major focuses are Industrial Organization and Applied Econometrics. My minor focuses are Behavioral and Experimental Economics. Below you can see the courses I have taken.

Courses Taken:

- 2nd Year Sequence in Econometrics
- 2nd Year Sequence in Industrial Organization
- 2nd Year Sequence in Experimental Economics
- 2nd Year Course in Behavioral Economics
- 2nd Year Course in the Economics of Innovation

WORK EXPERIENCE

Teaching Assistant – PhD Econometrics I (NYU) Sept 2017-Present

- Leading TA sessions for 25 first year PhD students. Course covers measure theory, ordinary least squares, instrumental variables, and introduces basic statistical tests.
- Responsibilities include designing and giving lectures on important concepts in measure theory and regression analysis, grading homework assignments, and helping to design the midterm and final exams.

Research Assistant – Prof. Petra Moser (NYU) May 2017-Present

- Created a scraping algorithm in Python to retrieve history of patents given an author and/or a company name. Algorithm successfully scraped 9,000 scientists' and 1,000 companies full patent history.
- Created and analyzed datasets on patent activity using Python. Tasks included basic regression work, plotting and other data analysis tasks.

Research Assistant – Prof. Guillaume Frechette (NYU) May 2016-Present

- Responsible for coding in zTree and running laboratory experiments in the Center for Experimental Social Science.
- Other tasks included re-analyzing old experimental data to determine optimal strategies in a learning experiment and quantitatively detail possible mechanisms driving player behavior.

RESEARCH STATEMENT

My research focuses on the impact of heterogeneous learning and experience on market outcomes in online marketplaces. Online marketplaces are new environments for both buyers and sellers. On the buyer's side, there are increased informational asymmetries. Buyers on online sites have to rely more on the experience of other users to help guide product choice. This asymmetry requires buyers to learn how best to incorporate both revealed and stated preferences of others in making choices. On the seller side, new e-commerce sites have lower fixed costs to entry, allowing firms to enter markets quickly and cheaply. However, entry into new markets by inexperienced firms affects equilibrium prices and quantities. Understanding how firms enter, learn and adjust is important to understanding equilibrium outcomes. Both the firm and consumer are tied together by similar learning problems, which motivates the research projects discussed below.

I currently have three separate projects detailing learning in online market places. One project is an experimental setting, focusing on optimal information acquisition with model uncertainty. In a simple experimental setup, subjects are shown the actions of others, and we experimentally manipulate how informative those actions are. The motivation for this project are check-in sites such as Foursquare, which publicly displays where friends are currently located. The question is how do beliefs and actions change as the information provided by other people's actions changes?

In a separate project, I study how firms learn to set prices on a widely used e-commerce platform. I have price history data for each firm, as well as, time-invariant firm level characteristics. The focus of the project is to identify heterogeneity in learning, and how this impacts equilibrium price dispersion and aggregate demand. Similar to noise-trading models, the idea is to understand how varying the informativeness of individual firms pricing decisions impacts aggregate price dynamics and market clearing outcomes. Too many inexperienced firms generate large dispersion, whereas too few inexperienced firms generates near uniform pricing, both having detrimental effects on consumer welfare.

My final project ties social learning and market outcomes together. Specifically, a co-author and I study how heterogeneity in experience bias online review systems. Our question is do more experienced reviewers rate products differently than inexperienced users? Furthermore, do experienced users choose different products than inexperienced users? If ratings and selection of products differ in certain ways, reviews are uncorrelated with underlying product quality. Thus, reviews are uninformative to new buyers. We write down a theoretical model justifying this conclusion. Using data scraped from a popular movie review website, we confirm the predictions of theoretical model. Finally, we propose a novel way to de-bias reviews so that reviews reflect underlying product quality.