

1. Contact Information:

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2. Course of Study:

I'm a third year PhD student from Information Systems (IS) in R.H. Smith School of Business at University of Maryland College Park. I apply Economics theories and methodologies to my IS research to examine the causal impact of new technologies. I particularly focus on Experimental Economics, Behavioral Economics and IO as my minor of study. Before I came to Business School, I studied Computer Science and specialized in data mining and analytics.

Summary of the doctoral courses I've taken:

Econ courses (Current Focus):

Micro Economics

Econometrics

Experimental Economics by *Prof. Erkut Ozbay*

Behavioral Economics by *Prof. Pamela Jakiela*

Causal Inference Workshop by *Prof. Angrist, Prof. Rubins, Prof. Abadie et al.*

Information Systems and Marketing courses (Current Focus):

Analytical Modeling by *Prof. David Godes*

Information Systems Economics I & II

Current Research in IS: Quality Transparency and the Value of Information

Research in Strategy and Information Systems I & II

Behavioral IS Seminar I: Individual, Teams and Community

Behavioral IS Seminar II: Firms, Collectives and Institutions

Computer Science courses (Before IS):

Statistical Methods

Artificial Intelligence

Machine Learning

Natural Language Processing

Advanced Topics in Information Processing: From Data to Insights

Experimental Design for Behavioral and Social Sciences

3. Research Interest

Digitalization and related technologies reduce the search costs and provide more information to the firms and consumers. In general, I'm interested in understanding how these technologies/business impact consumers' decision-making and how they affect the traditional business/platforms. The understanding will provide insights on how firms should design and improve their products and marketing strategies. From a methodology perspective, I'm interested in designing field experiments in real-world platforms, and combining analytical models to facilitate hypothesis development and applying machine learning methods to examine heterogeneous treatment effects.

Specifically, my current research interests are in the areas of mobile technologies, online matching markets and social media marketing. One of my working papers is to investigate how to motivate effective mobile app adoptions through a large-scale randomized field experiment. Firms have spent hundreds of millions of dollars each year to promote their mobile apps through external interventions, but no systematic studies have shown that such induced mobile app adoptions indeed are beneficial to the firms. Most of the previous studies focus on the effect of organic app adoptions using observational data while my paper seeks to answer 1) whether firms can effectively motivate additional app adoptions through interventions, 2) whether such induced mobile app adoptions can lead to sustainable increase in consumers' purchases. I designed two types of interventions – monetary incentives and information inducements, which are the two most commonly used motivating strategies in practice. With a control group, I randomly assign over 200,000 subjects into one of the three groups and track all individual-level transaction and browsing data. I use Local Average Treatment Effect to identify the causal effect of induced app adoptions on purchases to tease out organic adopters and non-adopters. Interestingly, in contrast to conventional wisdom, although both interventions are effective in inducing mobile app adoptions, only mobile app adoptions induced by *information* lead to significant increase in long-term purchases. Monetary incentives have no significant impact on consumers' purchases. More interestingly, I see strong *complementary* effect between mobile app channel and desktop channel. This suggests that when firms promote new channel, they shouldn't ignore the traditional channel since consumers exhibit cross-channel behavior along the journey.

Another work-in-progress project is to see how we can better mitigate the information asymmetry issue in online dating market and to facilitate the *growth* and *matching* of two sides – female and male. For this study, I'm also designing a randomized field experiment to identify the causal effect of the mechanism I proposed. Finally, I'm also looking at social media marketing, e.g. on Facebook, whether and how firms take an action in response of their alliance and competitors. This project involves variable extractions from text and pictures using dating mining and computer vision techniques.

Conference Talks:

- **Lanfei Shi** (with Tianshu Sun, Siva Viswanathan, and Elena Zheleva) Motivating Mobile App Adoption: Evidence from a Large-scale Randomized Field Experiment,
 - in Symposium on Statistical Challenges in eCommerce Research, Greece 2016
 - in Causal Inference Workshop, Chicago 2016
 - in Conference of Information Systems Technology, Nashville 2016
- **Lanfei Shi** (with Tianshu Sun, and Siva Viswanathan. The Diffusion and Business Value of User Generated Content on Social Media: Evidence from Twitter, in INFORMS Annual Meeting 2015