Yangfan Liang

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Education

- **Carnegie Mellon University** — Pittsburgh, PA
  - Ph.D. Student in Information System and Management — Aug 2016 - Present
- **University of Science and Technology of China** — Hefei, China
  - B.S. in Statistics — Sep 2012 - June 2016
  - Minor in Computer Science
  - Graduated with Guo Moruo Scholarship (*summa cum laude*)

Research Interest

- **Topics:** Consumer behaviour in digital markets, User-generated content, Online privacy.
- **Methodologies:** Econometrics, Machine Learning, Natural Language Processing

Working Paper

- Yangfan Liang and Rahul Telang (2019), "Consumer Response to Data Breach: Evidence from Consumer Transactions", *To be submitted to Journal of Policy Analysis and Management.*
  Abstract: Data breaches and identity thefts have dramatically increased in both scope and scale in recent years, in which large number of customers' information has been compromised. With a detailed dataset of anonymized transactions from a large bank in the United States, we use 2014 Home Depot data breach as a natural experiment to directly investigate how data breach affects customers relations with the retailer. We find that these potentially affected customers maintained their regular use of debit cards after the breach. Furthermore, there was no much difference in impact of data breach on Home Depot stores faced with different levels of competition and there were few changes in both frequency and amount of transaction. In short, though data breach caused about $300 million expenses for Home Depot, its customers rarely responded negatively to this adverse security event.

Work in Progress

- Yangfan Liang, Michael Smith, Daegon Cho, and Gordon Burtch (2019), "Impact of Early Digital Movie Release on Box Office: Evidence from Korean Market".

  Abstract: Recent years in Korea, the major studios introduced Super Premium VOD/EST releasing, shrinking the digital windows of movies from around 90 days to around 30 days. These SP releases usually begin 28 days after theatrical premiere, last for about two weeks, and charge higher price than Early EST. Since different studios adapted this strategy at different year, this serves as a quasi-experiment for understanding the impact of SP release on box office. By comparing SP and nonSP titles' box office in Korea, as well as same titles' box office in US and Korea, we found that the parallel pre-trend assumption needed in difference-in-difference is likely to be violated. After introducing generalized synthetic control method, we found that there is no significant impact of SP release on box office in Korea.

- Furqan Khwaja, Yangfan Liang, Ravi Koka, Viv Penninti and Sunder Kekre (2019), "Predicting stock Sentiment with BERT".
- Yangfan Liang, Ravi Koka, Viv Penninti, Sunder Kekre and Rahul Telang (2019). "Portfolio Management with Stock Sentiment."

Conference Presentations

Consumer Response to Data Breach: Evidence from Consumer Transactions.

- *Annual Privacy Law Scholars Conference (PLSC)*, Berkeley, California, May 2019.

Teaching Experience

Teaching Assistant

- Information Security Policy & Management (by Brett Tucker) — Spring 2019
- Advanced Business Analytics (by Rahul Telang) — Fall 2018
- Advanced Business Analytics (by Beibei Li) — Spring 2019, Fall 2019
- Digital Transformation (by Michael Smith) — Fall 2018, Fall 2019

Ad-Hoc Reviewer

- Conference on Information Systems and Technology (CIST)
- International Conference on Information Systems (ICIS)

Grant, Honors and Awards

- PNC Center for Financial Services Innovation Research Grant, CMU — 2017
- Presidential Fellowship, Carnegie Mellon University — 2016
- Guo Moruo Scholarship (Highest honor for USTC undergraduate), USTC — 2015
- National Scholarship (Top 1%), Ministry of Education of China — 2014

Selected Coursework

Machine Learning and Statistics

- Machine Learning with Large Datasets (A+) — Spring 2019
- Convex Optimization (A) — Fall 2018
- Statistical Machine Learning (A+) — Spring 2018
- Topics in Deep Learning (A+) — Fall 2017
- Intermediate Statistics (A) — Fall 2017
- Introduction to Machine Learning (A+) — Spring 2017

Marketing and Economics

- Bayesian Statistics Marketing (A+) — Spring 2019
- Econometric Theory and Methods II (A+) — Spring 2018
- Analytical and Structural Marketing Models (A) — Spring 2017
- Game Theory and Applications (A) — Spring 2017
- Introduction to Econometric Theory (A) — Spring 2017
- Microeconomics (A+) — Fall 2016

Programming Skills

- Python, R, C, LaTeX.

References

Prof. Rahul Telang
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Prof. Michael D. Smith
Heinz College, CMU
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Prof. Beibei Li
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