Ang Li

PhD student, 2016-present

University of Pittsburgh | School of Computing and Information

I am interested in social computing and data science. Specifically, I am interested in utilizing data-driven methods to investigate social computing systems and to design better systems to support their users in achieving their goals.



EDUCATION

2016 – present University of Pittsburgh, Pittsburgh, PA

PhD in Information Science; 3.9/4.0 GPA

DePaul University, Chicago, IL 2013 - 2016

Master of Science in Predictive Analytics, 3.9/4.0 GPA



EXPERIENCE

June 2019 August 2019

Spotify, New York CITY, NY

Research Data Scientist Internship, Supervised by Dr. Benjamin Carterette

Research on understanding the users' podcast vs. music listening habits: this project intends to understand the causal influence of adding a new class of content on the users' original listening habits.

- > Adopting quasi-experimental techniques such as propensity score matching and difference-indifference, we assessed the causal influence of adding podcasts on the users' original music listening habits based on large scale observational data collected over one year.
- > Utilized statistical methods based on the large-scale log data, we examined users' consumption habits for podcasts vs. music and uncovered the differences.
- > A machine learning model was then developed to predict users' listening content based on their listening habit, and the model can achieve high accuracy rate.

June 2018 August 2018

Spotify, Boston, MA

Research Scientist Internship, Supervised by Dr. Jenn Thom

Research on the music search mindset project: This project intends to understand how users seek information in the domain of the music search.

- > Guided by the usability test and interview study, we designed and conducted a user survey to gather data directly from users about their mindsets when they search music using mobile devices.
- > Utilized statistical methods and machine learning techniques based on the large-scale log data, we examined users' behavior to infer users mindset as they approach a music search. The model achieve good accuracy level.
- > The results uncover the different behavior patterns when users conduct a music search and provide design implications on how to improve current platform to better support users

March 2016 Present

University of Pittsburgh, PITTSBURGH, PA

Research Assistant, Research Supervisor: Dr. Rosta Farzan, Dr. Yu-Ru Lin

Working with faculties on research projects that understand the user behaviors in various social media platforms including Wikipedia and twitter, the results contribute to design implications of more effective systems that can support their users in achieving their goals. Research methods include analyzing and modeling the large-scale human generated online behavior data by conducting:

- > Generalized regression analysis to evaluate the relationship between users' content production process and the content quality/bias as outcomes;
- > Survival analysis to evaluate the member retention in the platform;
- > Mediation analysis to examine the mediation factors between social interaction pattern and members' production as well as retention
- > Network analysis to discover social interaction patterns;
- > NLP techniques (e.g. topic modeling, word-embedding, sentiment analysis, etc.) to process the user-generated content and extract the linguistic features and topics;
- > Extract insights from data analysis and propose design implications for the online communities.

June 2015 December 2015

Northwestern University, Social Media Lab, EVANSTON, IL Research Assistant, Supervised by Dr. Jeremy Birnholtz

Research on the *Attention Management Project*: This project explored attention management and negotiation on mobile devices to understand how users' attention shifted among different contact groups based on social ties.

- > Analyzed the cell phone data collected from over 100 participants of one month.
- > Generated new constructs to measure people message response behavior based on mobile phone usage data
- > Utilized hierarchical clustering algorithm to group the contacts based on their cell phone usage behavior to understand differences in their interaction strategies.

PUBLICATION

- 1. **Li, A.**, Thom, J., Chandar, P., Hosey, C., Thomas, B. S., & Garcia-Gathright, J. (2019, May). Search Mindsets: Understanding Focused and Non-Focused Information Seeking in Music Search. In *The World Wide Web Conference* (pp. 2971-2977). ACM.
- 2. Li, A., & Farzan, R. (2018, September). Keeping up on Current Events! A Case Study of Newcomers to Wikipedia. In *International Conference on Social Informatics* (pp. 348-369). Springer, Cham.
- 3. Chung, W. T., Lin, Y. R., Li, A., Ertugrul, A. M., & Yan, M. (2018, September). March with and Without Feet: The Talking About Protests and Beyond. In *International Conference on Social Informatics* (pp. 134-150). Springer, Cham.
- 4. Zheng, K., Li, A., & Farzan, R. (2018, March). Exploration of Online Health Support Groups Through the Lens of Sentiment Analysis. In *International Conference on Information* (pp. 145-151). Springer, Cham.
- 5. Birnholtz, J., Davison, J., & Li, A. (2017). Attending to attention: How do people attract, manage, and negotiate attention using mobile devices? *Mobile Media & Communication*, 2050157917714504.
- 6. Li, A., Chau, H., & Lin, Y. R. (2017). Predicting Student's Performance Based on Their Reading Behaviors. In *International Conference on Social Computing, Behavioral-Cultural Modeling and Prediction and Behavior Representation in Modeling and Simulation*

♣ ACADEMIC SERVICES

- > Reviewer of ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW) 2018, 2019
- > Reviewer of AAAI Conference on Web and Social Media (ICWSM) 2020
- > Reviewer of ACM Transactions on Social Computing Journal
- > Student volunteer for CSCW 2018

Skills

Data Mining R, Python, Matlab

Database Relational Database, SQL

Statistical Analysis R, SPSS and SAS

Data Visualization Gephi, Tableau, D3.js