

# LI LIU

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## EDUCATION

### THE UNIVERSITY OF CHICAGO

**M.A. in Computational Social Science** (Track: Economics), GPA: 3.9

Chicago, IL  
(Expected) Jun 2020

- Awards: Social Science Division Academic Scholarship (\$60k)
- Coursework: Computational Modeling and Research, Machine Learning, Quantitative Marketing, Causal Inference, Computational Linguistics, Behavioral Economics, Survey Research Methodology, Python Programming, Spatial Data Science

### INDIANA UNIVERSITY

**B.S. in Applied Mathematics & B.A. in Economics**, GPA: 3.6

Bloomington, IN  
May 2018

- Awards: Undergraduate Research Grant (\$1k), Dean's List, Omicron Delta Epsilon (Economics Honor Society)
- Coursework: Applied Econometrics, Financial Econometrics, Numerical Analysis, Probability and Statistics, Network Analysis

## COMPUTATIONAL EXPERIENCE

### THE UNIVERSITY OF CHICAGO

**Teaching Assistant - Computational Social Science M.A. Program**

Chicago, IL  
Jan - Mar 2020

- Mentored students during office hours and graded weekly assignments in Python and R for the Computational Modeling course
- Led 4 lab sessions independently on reviewing the statistical concepts, answering questions, and implementing the models in R
- Initiated and maintained a password-protected Shiny web app in R for 40 students to check grades and feedback easily

**Student Researcher - Open Source Economics Laboratory Boot Camp**

Jul - Aug 2019

- Collaborated with other 25 graduate students from top universities to code daily assignments in computational economics
- Learned computational and modeling skills in Python for conducting dynamic economic research and policy analysis

**Data Analytics Assistant - Harris School of Public Policy**

Feb - Jun 2019

- Introduced the linear sum optimization algorithm to improve the matching results of the Alumni Connect program by 10%
- Researched on modeling graduates' career outcomes and cleaned students' surveys by extracting and transforming features
- Collected information on 150+ potential future donors for the Harris school by scraping and documenting web data in Python

## ANALYTICAL PROJECTS

**What Makes Amazon Reviews Trustworthy?**

Nov 2019- Apr 2020

- Generated 15 characteristics variables for one keyboard product's reviews on Amazon using text mining and topic models
- Developed a variable selection method by combining results from random forest, linear regression, and Lasso regression
- Discussed why certain characteristics of the Amazon reviews are important of forming the review trustworthiness for customers

**Preference-Based Recommendation Model for Groups**

Jan - Mar 2020

- Hosted weekly meetings with 2 Booth MBA students to build the utility theory, write Python scripts, and draft summary reports
- Estimated the group's expected satisfaction of dining at certain restaurant by random forest from Yelp's data in Python
- Purposed a recommendation model to aggregate group members' preferences and rank the matched restaurants for users

**Analyzing Developers' Online Behavior on Stack Overflow**

Apr - Jun 2019

- Collaborated with 3 classmates to manage the project on GitHub, form the hypothesis, and process the raw data (25 GB)
- Performed exploratory data analysis in R on activity counts, developers' locations, most popular languages, and tags network
- Applied Hadoop to find that developers' sentiments in answers were negatively correlated with languages' popularity

## LEADERSHIP

- **Team Leader, Harris School of Public Policy Hackathon** (Nov 2019 - Jan 2020): Directed a team of 5 to design and develop a social media platform for students to share their class projects concisely with peers and potential employers; presented the project for 100+ participants and Harris staff; won the best idea award among 13 teams at the hackathon
- **Social Activities Chair, Social Sciences Graduate Student Activities Committee** (Oct 2019 - present): Managed a \$7k budget to organize and lead social events for 80 students in the program; collaborated with chairs from other programs to host events
- **Vice President, Chinese Calligraphy Club at Indiana University** (Dec 2015 - Dec 2016): Launched a new club website and edited monthly newsletters to promote the events; increased the number of weekly workshop participants by 30%; raised 2k+ revenue by selling the handwritten Spring Festival Couplets to IU students in one month

## TECHNICAL SKILLS

- **Programming Languages:** 2-year Python & R & SQL & STATA experience
- **Software & Tools:** Proficient in Microsoft Excel, Git, Tableau