

# LI LIU

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## EDUCATION

### THE UNIVERSITY OF CHICAGO

Chicago, IL

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

(Expected) Jun 2020

- Awards: Academic Scholarship (\$60k)
- Coursework: Behavioral Economics, Behavioral Science Research Methods, Survey Research Methodology, Computational Modeling, Quantitative Marketing, Causal Inference, Computational Linguistics, Computational Content Analysis

### INDIANA UNIVERSITY

Bloomington, IN

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

May 2018

- Awards: Undergraduate Research Grant (\$1k), Dean's List, Omicron Delta Epsilon (Economics Honor Society)
- Coursework: Applied Econometrics, Linear Algebra, Numerical Analysis, Probability, Statistical Inference

## TECHNICAL SKILLS

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

## COMPUTATIONAL EXPERIENCE

### THE UNIVERSITY OF CHICAGO

Chicago, IL

**Student Consultant - Booth School of Business**

Apr 2020 - Present

- Selected as the only non-MBA student into the Algorithmic Marketing Lab class and work on an analytics project for Grubhub
- Define the business problem with clients and apply difference in difference method to evaluate the driver incentives policy

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

Jan - Mar 2020

- Led 4 lab sessions independently on reviewing the machine learning concepts and teaching students to implement 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%
- Cleaned students' survey data to extract features and applied machine learning to predict job placements
- 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?** (Master's Thesis)

Nov 2019- Apr 2020

- Generated characteristics of a sample data of consumer 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
- Summarized the findings of what reviews are trustworthy and formulated new model for customers' review reading behaviors

**Preference-Based Recommendation Model for Groups** (Class Project)

Jan - Mar 2020

- Hosted weekly meetings with 2 Booth MBA students to discuss the business problem, analyze data, 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** (Class Project)

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