LI LIU

5608 S. Harper Ave., Chicago, IL 60637 | (812) 287-3072 | lliu95877@gmail.com
LinkedIn Profile: https://www.linkedin.com/in/liu431/
Portfolio: https://liu431.github.io/; GitHub Handle: https://github.com/liu431

PROFILE

- **Career Interests**: Business Analytics, Machine Learning, Data-driven Decision Making
- **Programming Languages**: Python, R, SQL; **Software & Tools**: MS Excel, Hadoop, Git, Tableau, Hadoop
- **Selected Coursework**: Computational Modeling, Applied Econometrics, Quantitative Marketing, Causal Inference, Machine Learning, Computational Linguistics (NLP), Survey Research, Network Analysis, Behavioral Economics, Unsupervised Learning
- **Languages:** Mandarin Chinese (Native)

EDUCATION

University of Chicago, Chicago, IL
M.A., Computational Social Science (Track: Economics), GPA: 3.9/4.0, Expected: June 2020

Indiana University, Bloomington, IN
B.S., Applied Mathematics & B.A., Economics (honors), GPA: 3.6/4.0, May 2018

ADDITIONAL TRAINING

Open Source Economics Laboratory Boot Camp, Chicago, IL
Student Researcher, July 2019 - August 2019

- Collaborated with other 25 graduate students from top universities to work on daily projects in Computational Economics
- Programmed dynamic discrete choice models in Python for optimizing marketing decisions such as advertising and pricing
- Utilized high-performance computing for structural model estimation using the UChicago Midway compute cluster

PROFESSIONAL EXPERIENCE

The University of Chicago, **Computational Social Science, Chicago, IL**
Teaching Assistant, Computational Modeling, January - March 2020

- Mentored students during office hours on concepts in statistics and machine learning; graded weekly assignments in Python/R
- Led 4 lab sessions on reviewing the concepts and implementing the statistical models in R
- Initiated and maintained a password-protected Shiny web app in R for 40 students to check grades and feedback for assignments

The University of Chicago Harris School of Public Policy, **Chicago, IL**
Research Assistant, Data Analytics Team, January - May 2019

- Introduced the linear sum optimization algorithm to improve the matching payoffs of the Alumni Connect program by 10%
- Examined researches on modeling job placement and extracted new features from students' surveys for predicting placements
- Assembled a database of potential donors for the Harris school by scraping web data on charitable donors in Python

PROJECTS

Team Project (Python): Analyzing Developers' Online Behavior on Stack Overflow, April - June 2019

- Created the time-series plots of 10 selected languages' popularity and sentiments in the last 10 years by Hadoop
- Developed and proposed the dashboards for Stack Overflow to monitor the trends of languages' popularity and users' sentiments

Team Project (Python & R): Self-marketing Approaches---An Analysis of Online Dating, October - December 2019

- Constructed structural topic models to quantify how users from different demographics write differently about themselves
- Conceptualized a new algorithm for scoring and evaluating users' self-introductions using K-means clustering and topic models

Individual Project (Python): Preference-Based Recommendation System for Groups, June 2019 - March 2020

- Generated new features of dining experience and restaurant ambiance from Yelp reviews to predict customers' satisfaction scores
- Invented a novel predictive model for recommending the fittest restaurants for a group of users with different preferences

LEADERSHIP

Pshiny – a platform for sharing student projects, Harris School of Public Policy, Chicago, IL
Team Leader, November 2019 - January 2020

- Originated a social media platform for students to showcase their projects concisely with peers and potential employers
- Directed a team of 5 students to brainstorm ideas, draft the proposal, survey students, and develop the website prototype
- Presented the project for 100+ audience and won the best idea award from HarrisHack (campus-wide hackathon competition)