## Yutong Dai

**y** yutongd3@illinois.edu ⋅ **(**+1)217-721-9646

A One South, 1347 N Lincoln Avenue Urbana, IL 61801

## **EDUCATION**

University of Illinois at Urbana-Champaign (UIUC), IL, USA

Sept.2017 - May.2019 (Expected)

*M.S.* in Statistics GPA: 4.00/4.00

Sichuan University (SCU), Sichuan, China

Sept.2013 - Jun.2017

GPA: 3.68/4.00

*B.S.* in Mathematics with honor (Concentration in Statistics)

**RESEARCH & EXPERIENCES** 

**Research** Dec.2016 – Dec.2017

Research Topic: Convergence Rate Analysis of Parallel Block Coordinate Descent Method [Link]

Adviser: Prof. Yang Weng

Submitted to Neurocomputing, under review

- Proposed synchronous parallel block coordinate descent algorithms for minimizing a genre of composite functions with sub-linear convergence rate
- Implemented algorithms to solve large scale logistic regression with  $\ell_1$  norm penalty

**Research** Aug.2016 – Nov.2017

Research Topic: Attention Data Provides Insights into the Feedback Mechanisms in Financial Market Bubble[Link]

Adviser: Prof. Yang Weng

Submitted to PlOS ONE, under review

- Utilized the search volume index as the novel and leading measurement of public attention to study the stock market bubble generating feedback hypothesis
- Tested the hypothesis on Nasdaq Composite, Dow Jones Industrial Average, S&P 500 Index with theirs Google Trend Index

Internship Jan. 2018 – Present

Data Science Intern at Anheuser-Busch InBev Location: Urbana, IL

- Developed business insights using statistics and computer science to identify the best barley growing regions in countries of operation and to suggest the best barley varieties and management practice
- Provided analytics to global Agronomic and Procurement teams

Project: Real Estate Market Data Analysis

Dec.2017

Group Leader Adviser: Prof. Feng Liang

- Performed data cleaning, querying, and exploration in R and python
- Developed data products to help Airbnb hosts to determine listing prices using Sparse Regression and Random Forest
- Researched how amenities and geolocation influence listing prices
- Designed a User Interface for customers to gain insight into Airbnb rental markets in Boston [Link]

**Project**: Predicting Box Office Revenue and IMDb rating for Movies

Dec.2017

Group Leader Adviser: Prof. Ruoqing Zhu

- Developed a revenue prediction model based on Gradient Boosting, Random Forest and Elastic Net
- Designed a classifier to predict the IMDb ratings based on SVM and Sparse Logistic Regression

**Contest**: Interdisciplinary Contest in Modeling[Link]

Feb.2016

Group Leader Adviser: Prof. Rui Zhu

**Awards**: Meritorious Winner (Top 8%)

- Addressed the problem of ranking the shortage degree by using systematic cluster analysis
- Modified Cobb-Douglas production function to find the mechanism of how social and environmental drivers influence supply and demand
- Devised an intervention strategy based on the existing Lesotho Highlands Water Project

## **HONORS & AWARDS**

• Dean's List (Top 10) 2014-2017

• 2<sup>nd</sup> Prize, National College Students' Mathematical Modeling Competition

2015

• Excellent Student Leader, Sichuan University

2014

## **SKILLS & TOOLS**

- Skills: Machine Learning Fundamentals, Scientific Data Visualization
- Software and Programming: R, Python, SAS, IATEX, Rmarkdown, Rshiny, SQL