

TIANYUE (ANDY) MAO

EDUCATION

University of Illinois at Urbana-Champaign

Champaign, IL

Master of Science in Statistics | GPA: 3.8/4.0

Graduation Date: May 2018

Relevant Coursework: Applied Regression and Design, Statistical Learning, Foundations of Data Science, Statistics

Programming Methods, Statistical Data Management, Advanced Data Analysis, Mathematical Statistics, Applied Multivariate Analysis, Databases, Data Mining, Data Visualization

SKILLS

Programming Skills:

- Proficient – Python, R, SQL, Tableau, SAS, Excel, WEKA
- Experience with – Java, D3.js, Unix, RShiny, Apache Hadoop, Spark, Hive, Pig, SharePoint Designer, HTML, CSS

Languages: English (native), Mandarin (native), French (intermediate)

PROFESSIONAL EXPERIENCE

Synchrony Financial | *Data Science Intern*

May 2018-Sept 2018

- Lead external research with credit, marketing, and collections to improve credit card fraud detection by building a Python package that contains a pipeline with methodical approaches for dealing with extremely imbalanced big data
- Extract insights from machine learning classifiers after applying resampling techniques to improve business decision making
- Create novel metrics, based on literature review and simulations, to quantify the severity of data imbalance by capturing information that are currently not measured by the industry standard metrics

Dow AgroSciences | *Business Analyst Intern*

May 2017-May 2018

- Predict the approval duration for the registration of chemical products in different states and countries to optimize marketing and sales strategies using linear regression, Lasso, Random Forest, and clustering techniques
- Provide the company with \$2 million in yearly savings by designing complex SQL databases and protecting the database integrity by creating Tableau visualizations, filters, and dashboards
- Responsible for maintaining Tableau, SharePoint, and SQL servers for over 5 different projects and routinely communicate with business stakeholders to continue developments

Technology Services (University of Illinois at Urbana-Champaign) | *Senior Consultant*

Aug 2014-Apr 2017

- Provide customer services for all IT issues across campus including wireless, VPN, laptops, antivirus, and installations
- Mentor onboarding consultants through hands-on training and documenting expertise through creating knowledgebase articles

EXTRACURRICULAR

Data Analytics/Machine Learning Competitions

- Synchrony Financial Datathon, *Winner: Best Presentation (30 Teams)* Apr 2018
- Saint Mary's Data Analytics Competition, *Top 5 (25 Teams)* Mar 2018
- Midwest Undergraduate Data Analytics Competition, *Top 5 (35 Teams)* Apr 2017

Illini Statistics Club, *President/Graduate Advisor*

May 2016-May 2018

- Collaborate with employers and other on-campus organizations to provide a wide scope of opportunities for club members
- Host the inaugural club data analytics competition and reached over 80 passionate students across campus
- Lead and manage other executive board members to create a collaborative and productive working environment

PROJECT EXPERIENCE

Analysis of Amazon Reviews to Predict Users Ratings

Jan 2018-Present

- Apply natural language processing methods from NLTK and tidytext to clean and quantify customer reviews
- Maximize information extraction from one million variables through dimension reduction techniques including PCA and LASSO

Text Mining and Classification on Twitter Dataset

Mar 2017-May 2017

- Utilize machine learning models such as KNN, Logistic Regression, RF, and GBM to classify user gender and bot detection
- Achieve best accuracy of 66% for gender classification and 87% for bot detection using combinations of ensemble methods