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|  | 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