

# Xiaohan (Aria) Wang

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## EDUCATION

**Northwestern University** Evanston, IL

**September 2019 – December 2020**

*Master of Science in Analytics*

- **Cumulative GPA: 3.93/4.00**
- Expected coursework: Text Analytics, Data Warehousing, Analytics Value Chain, Generating Business Values with Analytics, Social Network Analytics

**University of California, Los Angeles (UCLA)** Los Angeles, CA

**September 2015 – June 2019**

*B.S. in Statistics and B.S. in Mathematics/Economics*

- Cumulative GPA: 3.86/4.00; **Major GPA: 3.92/4.00; Dean's Honors List of UCLA (8 out of 12 quarters)**

## RELEVANT SKILLS

- **Technical:** Python, R, MySQL, PySpark, MapReduce, Git, AWS, Java, Tableau, D3.js, ArcGIS and SAS
- **Data Science:** Predictive Analytics, Data Mining, Time Series, A/B Testing, Data Visualization, Deep Learning
- **Language:** Native Speaker of Chinese (Mandarin), Fluent English and Conversational French

## RESEARCH & INTERNSHIP EXPERIENCES

**Spiegel Research Center, NU** Evanston, IL

**June 2020 – August 2020**

*Research Assistant*

- Analyzed the reading engagement behaviors with customer data from WEHCO Media, and assisted the local media industry to shift from advertising-based strategy to reader-based revenue models
- Performed data cleaning and feature engineering using PySpark, predicted customer churn and win-back, and assessed the effectiveness of newsletters and pricing strategies
- Evaluated the reliability of current engagement metrics, and provided suggestions for WEHCO to increase customer retention rate by developing a regular reader habit

**Acumen, LLC** Burlingame, CA

**June 2018 – September 2018**

*Statistical Programmer Intern*

- Analyzed the historical patterns of syndromes with SAS to assist with the development of methods used for FDA's real-time surveillance of influenza and related outcomes
- Evaluated the relationship between pharmacy chains and beneficiaries' behaviors using random forests in observational drug studies

## SELECTED PROJECTS

**Everybody Eats**, Evanston

**June 2020 – Present**

- Balance the food supply and demand for the food insecure community in Evanston by analyzing data gathered from local organizations and households, and facilitate transparent and informed cooperation amongst partner agencies
- Visualize the vulnerable community and the active charitable food assets in Evanston, predict potential scenarios of increased food insecurity due to COVID-19, and help build community food resilience in the city

**Mask On – Face Mask Detection**, NU

**April 2020 – June 2020**

- Built a face mask detection model with Convolutional Neural Network (VGG16), and reached about 82% accuracy in recognizing whether the image subjects wear face masks and the type of masks they wear
- Developed a real-time face mask detection tool that outputs bounding boxes around masks on image input and helps the public get better informed of the local mask rate, especially during the COVID-19 pandemic

**Open-Source Marketing Intelligence Repository**, HSBC Bank

**October 2019 – June 2020**

- Created an open-source SQL data repository that can be leveraged for existing revenue analysis within HSBC
- Detected market dynamics from geospatial data with multiple models (Lasso, Random Forest), identified groups of branches with consolidation/closure potentials using K-means clustering, and created ArcGIS visualization dashboard

**Predicting "Match" in a Speed Dating Experiment**, NU

**January 2020 – March 2020**

- Identified influential factors in dating decisions and built multiple machine learning models (Support Vector Machine, Neural Network, XGBoost) to predict the matching results for a speed dating experiment conducted at Columbia University in 2004
- Provided insights into the gender difference in mate selection, and the disparity between people's stated interests and actual preferences of their partners in dating