Yanchen Wang

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Education

Georgetown University, Washington, D.C. May 2019 - Present
Ph.D. Candidate, Department of Computer Science
Topic: Machine Learning Fairness and Transparency

Georgetown University, Washington, D.C. Aug. 2017 - May 2019
M.S. in Data Science, GPA: 4.00

University of California San Diego, La Jolla, CA Sep. 2013 - Jun. 2017
B.S., Joint Major in Mathematics & Economics, Minor: Accounting
GPA: 3.86, Magna Cum Laude

Research Experience

Graduate Research Assistant, Department of Computer Science**,** Georgetown U Jan. 2018 – May 2019

- Working on a project: ***Early Warning for Detecting Forced Migration in Iraq and Syria***
- Collected data between 2013 and 2017 that could potentially influence people's decision to flee such as weather, natural resources, terrain, and distance
- Analyzed Twitter volume and sentiment data as a signal of major events and level of violence in a location
- Built a hierarchal Bayesian model predicting number of refugees fleeing from a location to another
- Created visualizations using D3 to present our findings

Undergraduate Research Assistant, Department of Economics, UCSD Nov. 2016 - Jun. 2017

- Worked on a project: ***The Effect of Environment Policies on the Automobile Industry***
- Used Wards data on all new vehicle sales in the US and Canada between 2009 and 2015 to determine whether EPA policies affected consumers' purchase choices
- Cleaned and merged more than 10GB raw data from Wards using Stata and Excel

Publications

1. Lisa Singh*, Laila Wahedi*, Yanchen Wang*, Yifang Wei, Christo Kirov, Susan Martin, Katharine Donato, Yaguang Liu, Kornraphop Kawintiranon: Blending Noisy Social Media Signals with Traditional Movement Variables to Predict Forced Migration. KDD 2019: 1975-1983
   (* Singh, Wahedi, and Wang contributed equally to this research)

Entrepreneurial Experience

Credit/Ability, Cofounder, Washington DC Mar. 2018 – Present

- Cofounded business to create access to credit for underserved based on hackathon outcomes
- Build machine learning model to evaluate creditworthiness of individuals with subprime credit scores to make short-term personal loans more affordable

Internship Experience

Willis Towers Watson, Captive and Mutual Practice Department, Beijing Aug. 2016 - Sep. 2016

- Worked in a team completing financial modeling about insurance companies using Excel and Excel VBA

- Attended meetings with clients to discuss models and improved models according to feedback

Banco Bilbao Vizcaya Argentaria, Merge and Acquisition Team, Hong Kong Jun. 2016 - Aug. 2016
- Helped senior manager research companies and market conditions in possible transactions
- Attended meetings with clients and did internal coordination with other colleagues all over the world
- Learned how to use Bloomberg terminal to gather information on a company's relevant market performance

Extracurricular Activities

Vatican Hackathon (VHacks), Migrant & Refugee Category Mar. 2018
- A competition bringing together 120 students and 24 teams from 30 countries all over the world
- Was selected from more than 60 applicants from different departments to form a team of five students
- Designed a creditworthiness system for refugees who do not have access to traditional financial services
- Developed risk model algorithms calculating credibility score based on refugee's financial history and current situation in the host country
- Won First Place in the Migrant & Refugee Category

Data Specialist, Associated Students at UC San Diego Oct. 2015 - Jun. 2017
- Adjusted and cleaned data collected from survey using Excel
- Created visualization and presented results to the Associated Students President

Undergraduate Tutor, Department of Mathematics at UC San Diego Sep. 2015 - Jun. 2017
- Tutored students in different math classes such as Introduction to Probability, and Calculus
- Graded homework and exams

International Rescue Center, Volunteer Income Tax Assistant, San Diego, CA Dec. 2015 - Apr. 2016
- Helped low income families and refugees prepare tax returns
- Prepared more than one hundred tax returns during tax season of 2016

Skills
- **Data Analytics Skills**: data mining, database using SQL, machine learning both supervised (decision tree, random forest, SVM, and logistic regression) and unsupervised (clustering, deep learning, visualization), deep learning models
- **Computer Science Skills**: Algorithms, big data analysis tools: Hadoop, spark, hive, Amazon AWS
- **Programming Languages**: R, Python, Java, Stata, Matlab, SQL, Stata, Unix/Linux, git version control
- **Math Skills**: Optimization, Real Analysis, Linear Algebra
- **Statistics Skills**: Time Series, Regression, Probability Theory, and Statistical Learning