

## Yanchen Wang

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### Education

- Georgetown University**, Washington, D.C. Aug. 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 hierarchical 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

### Entrepreneurial Experience

- Credit/Ability**, Cofounder, Washington DC Mar. 2018 – Sep. 2018
- 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
- **Math Skills:** Optimization, Real Analysis, Linear Algebra
- **Statistics Skills:** Time Series, Regression, Probability Theory, and Statistical Learning

### 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)
2. Lisa Singh, Shweta Bansal, Leticia Bode, Ceren Budak, Guangqing Chi, Kornraphop Kawintiranon, Colton Padden, Rebecca Vanarsdall, Emily Vraga, Yanchen Wang: A first look at COVID-19 information and misinformation sharing on Twitter.
3. Lisa Singh, Katharine Donato, Ali Arab, Tomas Alvarez Belon, Abraham Fraifeld and Sean Fulmer, Douglas Post, Yanchen Wang. 2020. Identifying Meaningful Indirect Indicators of Migration for Different Conflicts. In Proceedings of KDD '20: ACM Humanitarian Workshop (KDD '20). ACM, New York, NY, USA.