

# Student's *T* Time

## Professor Ranjini Grove:

The advent of spring quarter was marked by celebration as UW students joined thousands of undergraduates across the U.S. to participate in DataFest. The intense two-day extravaganza kicked off on April 5 at the stylish WRF Data Science Studio with the big reveal (the dataset), and culminated on April 7 with presentations and prizes. For pictures and more information, visit the UW Statistics [Facebook](#) or [Instagram](#) pages. Please don't forget to "like" the photos and follow us!

This issue features the posters presented by our seniors at the Joint Poster Session with the Center of Statistics and the Social Sciences (CSSS). The topics run the gamut from basketball analytics to speed dating, and also include two datasets from closer to home: faculty salaries in UW Arts and Sciences and SAT scores versus cumGPA for UW freshman.

Additionally, senior Ronald Tang and alums – Nick Hertle and Abby Bratt (class of 2018) share details about their work and life post UW statistics.

As always, please feel free to let me know if you have a story to share.

## From the SPA Desk, Annie Wan:

Welcome to Spring Quarter! Only a few weeks in, much has already happened and there is much to look forward to. Last quarter, SPA hosted a lively Women in STEM Panel featuring UW Professors Daniela Witten, Bianca Viray, Zorah Fung, and Paula Heron. Coming into this quarter, students participated in a Data Workshop led by PhD student Sheridan Grant in preparation for DataFest, which occurred over the weekend of April 5th.

Additionally, SPA held a Statistics Department T-shirt and sweatshirt sale, which grossed enough revenue for SPA to cover event costs. On behalf of SPA, I'd like to sincerely thank the department students, faculty and staff for their support of our endeavors!

In these next two months, SPA will be hosting some events open to the entire department. The Statistics Department Spring BBQ will be on May 18th from 10am to 2pm at the Ravenna Park Picnic Shelter, and sometime within the next month SPA will be hosting a free Roller Skating and Archery Night at the UW IMA. Additionally, graduation planning is currently underway, so be sure to spend quality time with the students who will be leaving us soon. Overall, there is much to be excited about and celebrate this quarter, and I look forward to seeing you all at and around campus!

## Ask Mee-Ling

**Question: I did not pass a STAT course, what should I do?**

**Answer:** "I am sorry to hear that you were not able to successfully complete the course. Please contact [Prof Grove](#) or [me](#) to schedule an appointment so we can discuss your options and the BS Continuation Policy:

<https://www.stat.washington.edu/academics/undergraduate/major/continuation>

## KUDOS!

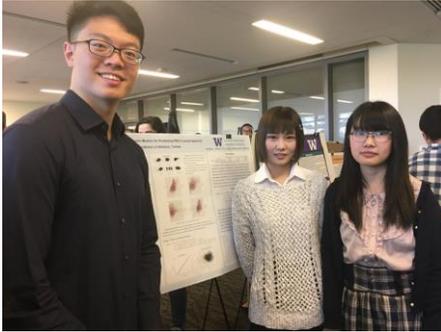
**Emily Flanagan, Connie He, Grace Radford-Tingley, and Julie Zhang for having posters accepted at the Statistics and Data Science Symposium, Bellevue, WA**



# STAT 423 Capstone Poster Presentation

## Group 1:

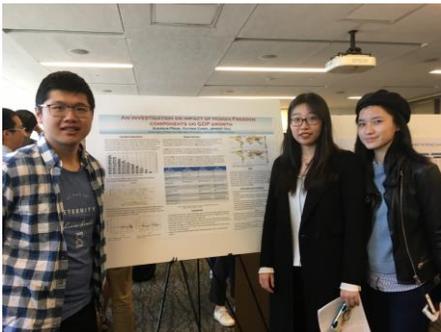
Exploring Potential Linear Regression Models for Predicting PM2.5 Levels Based on Various Gaseous Predictors in Banqiao, Taiwan.



Aaron Lin, Lingjie Wang, and Jiale Wu.

## Group 2:

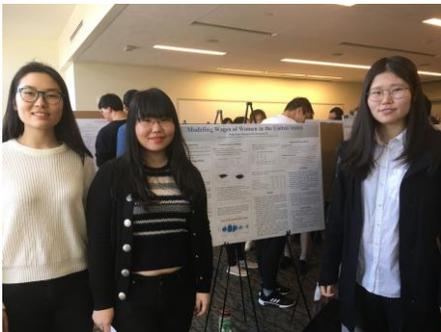
An Investigation on the Impact of Human Freedom Components on GDP Growth.



Yuting Chen, Xiaoyan Peng, and Jeremy Cheuk Wai Yau.

## Group 3:

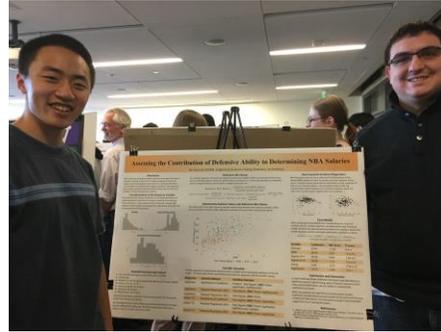
Modeling Wages of Women in the United States.



Ning Duan, Mengyao He, and Zhouyuan Xu.

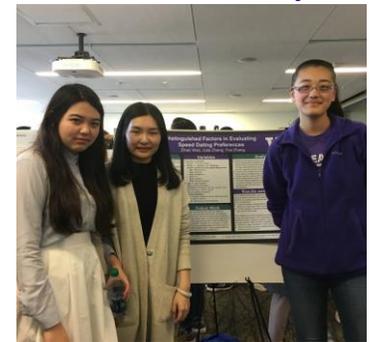
## Group 4:

Assessing the Contribution of Defensive Ability to Determining NBA Salaries.



Ari Goertzel and Aaron Huang.

Distinguished Factors in Evaluating Speed Dating Preferences.

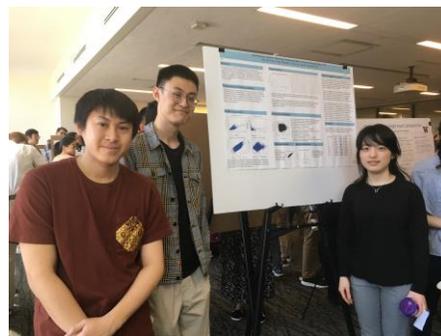


Zihan Wan, Julie Zhang, and Yue Zhang.

## Group 5:

## Group 6:

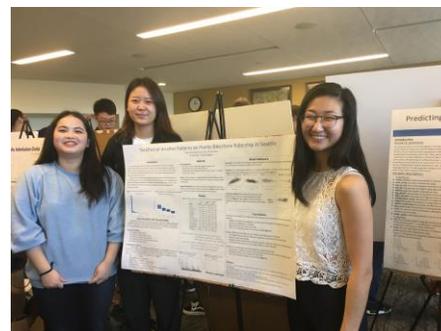
Identifying Factors Affecting Housing Sale Prices in King County, WA.



Danni Shi, Ronald Tang, Juan Ying.

## Group 7:

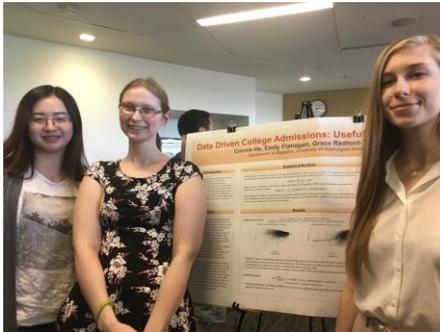
The Effect of Weather Patterns on Pronto Bikeshare Ridership in Seattle.



Annie Wan, Yuying Wang and Ruiqi Yan.

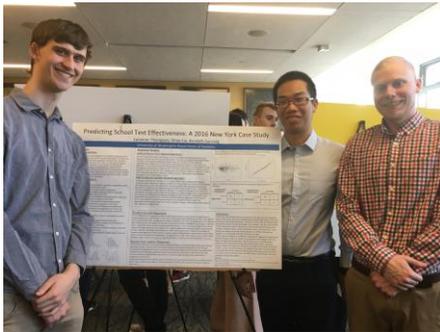


**Group 8:**  
**Data-Driven College Admission Criteria: Useful Metrics or Numeric Nonsense?**



Emily Flanagan, Connie He, and Grace Radford-Tingley.

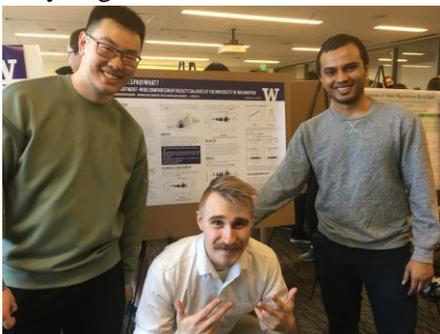
**Group 9:**  
**Predicting School Test Effectiveness: A 2016 New York Case Study.**



Yitian Cai, Kenneth Gunning, and Cameron Thompson.

**Group 10:**  
**The Effect of Department on Salary in the University of Washington's College of Arts and Sciences.**

Vaughn Johnson, Haozhe Li, and Thejas Vidyasagar.



*Life After UW*

**Nick Hertle (Class of 2018)**

I graduated from UW's Statistics undergraduate program in Winter 2018 and started a job as a data analyst in Agilent Technologies R&D working in immunohistochemical (IHC) device diagnostics. We work with pharmaceutical companies to develop IHC assays and get approval from the FDA (for example, Agilent created the PD-L1 companion diagnostic for Keytruda/pembrolizumab). These assays classify patients that are expected to respond positively to immunotherapy treatment for different types of cancer.

Programming courses and electives in the statistics department prepared me for the heavy-duty R coding that I do on a daily basis. Much of my work consists of understanding and applying combinatorics, parametric and non-parametric modeling of data, creation of appropriate and informative confidence intervals, and designing/reviewing experimental designs and statistical analysis plans. I also do a lot of technical writing for FDA review. It's essential to be able to articulate and justify statistical analysis, usually to non-statisticians, both internally and to regulatory bodies. The UW Statistics undergraduate program prepared me for many aspects of my job. The world of statistics is massive, and while I didn't study many of the tools (statistical & computational) that I encounter and use on a daily basis, the program gave me the ability to think critically about, understand, and apply new statistical methods. Equally importantly, I can identify when they are misused by non-statisticians.

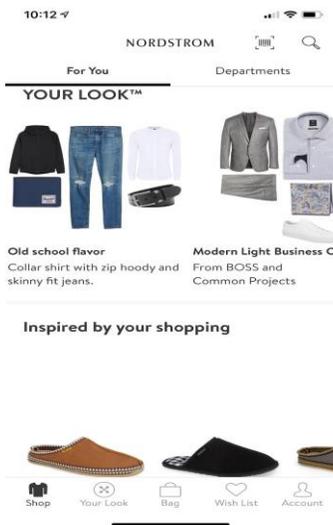




## Ronald Tang (Class of 2019)

I found my internship opportunity by going to career fairs and stumbling across a Nordstrom recruiter. Not realizing how important technology was to Nordstrom, I learned a lot about the company, what it stood for, and the direction it was taking with the rise of eCommerce. I kept in touch with the recruiter, and eventually I began the interview process for Nordstrom.

During the summer, I worked as an intern on the Gift Card Platform team at Nordstrom and received an interview opportunity with the Looks Tailoring team. Since the beginning of January, I have been working as a part-time engineer for this team and am planning on working full-time once I graduate.



As a clothes retailer, Nordstrom is interested in current fashion trends as well as recommending clothes suited to each customer's personal taste. The Looks Tailoring team is assigned with the task of recommending clothes based on past user activities on the Nordstrom website and mobile app, gathering data with a live-streaming

infrastructure in order to further improve our clothing recommendations. The Looks Tailoring team builds ranking and recommendation systems

utilizing machine learning algorithms, such as K-Nearest Neighbors, as well as graph analytics.

Currently, I am assigned tasks to support the integration of newer projects. Although I am a software engineer, there are many things I have learned in my Statistics courses that have helped me in my work, such as learning about regression lines and clustering. Even though Nordstrom is a clothing retailer, working here has showed that fashion is not just an art, but an exact science, with minute details impacting fashion trends. As I work more in the tech industry, I expect my knowledge in Statistics to be extremely useful.

## Abby Bratt (Class of 2018)

I graduated from the statistics department in 2018. After taking a few months off to backpack sections of the Pacific Crest Trail and visit my brand new nephew in Norway, I started a master's program in Quantitative Ecology and Resource Management (QERM) at UW. Broadly, I am interested in using mathematical and statistical models to better inform wildlife management decisions. To that end, my thesis work focuses on integrated population modeling for the streaked horned lark, a federally-threatened grassland bird native to Washington and Oregon. The model will be used to better understand survival, reproduction, dispersal, and potential impacts of conservation actions. When I'm not thinking about statistics, you can probably find me planning more trips on the PCT, birding, or playing soccer around Seattle. I hope everyone pays close attention in 421 and 423!

