

# Statistics © Illinois Newsletter 2017-2018

ILLINI HALL – HOME OF THE DEPARTMENT OF STATISTICS



From the Chair

Dear Statistics Alumni and Friends,

Greetings from Illini Hall! I have had the honor to serve as Chair of the Department of Statistics for a *number* of years now. It has been fantastic to see all the great students that come through our doors, and to participate in the development of an outstanding faculty and staff. We had many exciting developments over the past year, from national recognition of our faculty, to recognition of the amazing growth of our degree programs, to the many achievements of our students. We

hope you will enjoy learning more about these accomplishments in the pages that follow.

We are very proud of our alumni! Read their inspiring stories in our alumni spotlight series on our redesigned web page at www.stat.illinois.edu. It is gratifying to see them advancing to leadership positions in industry and academia nationwide. I hope you will take the time to read their stories, and please send us your updates!

Douglas Simpson, Department Chair

Dougla G. Simpson

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# **Statistics Year-in-Review**

Statistics @ Illinois is published annually as a Year-in-Review publication by the Department of Statistics. Statistics @ Illinois can be read at stat.illinois.edu/alumni/statisticsillinois

A special thanks to all those involved with generating content for this publication.

Content curated by Aaron Thompson

Statistics @ Illinois **Department of Statistics** 101 Illini Hall 725 S. Wright St Champaign, IL 61820

Douglas Simpson, Chair **Department of Statistics** 

Items of interest can be submitted to stat-office@illinois.edu for publishing to the stat.illinois.edu website and for inclusion to the next publishing of Statistics @ Illinois

Items pictured on this page in order:

- **Illini Statistics Student**
- New website launched Fall 2017
- Illini Statistics Club
- PhD Students at the annual Department Halloween Party
- David and Dan Dalpiaz at David's last UIUC lecture



### Illinois Ranks Among Highest Awarded Statistics Degrees

The University of Illinois at Urbana-Champaign Department of Statistics ranked 3rd in Statistics Bachelor's Degrees awarded consistently through 2011-2015 according to a Science Policy article posted on AMSTATNews (The Membership Magazine of the American Statistical Association) by ASA Director of Science Policy, Steven Pierson on October 1, 2017. Additionally, the Department of Statistics Master's degree programs ranked 4th from the preliminary data released from National Center for Education Statistics.



Over the five year period that was ranked, the Department of Statistics' Bachelor's program awarded a total of

464 Bachelor's degrees. There was a 175 percent increase in degrees awarded from 2011-2015, from 52 degrees in 2011 to 143 degrees in 2015. Only Purdue University and UC Berkeley outpaced the University of Illinois in degrees awarded to undergraduate Statistics majors.

The Master's degree programs consisting of a traditional M.S. degree, an Analytics Concentration program, and an Applied program ranked overall 4th during the reported survey, narrowly edging out the University of Michigan by one awarded degree. The Master's degree programs have seen a combined overall increase of 108 percent from 2011 through 2015. As the admitted rates of the MS program continues to increase in coming years, it is expected that the number of graduates is set to increase along with it.

Though the Statistics PhD program did not rank among the top 5 universities for this particular survey, the report did suggest that overall, PhD programs as a whole are seeing a steady increase in Doctoral degrees awarded. The Department of Statistics at the University of Illinois Urbana-Champaign saw 13 Doctoral degrees awarded at the end of the Spring and Summer 2017 terms.

The Science Policy articles through AMSTAT News that report on awarded degrees alternate their yearly reporting between the various demographics of degrees awarded. Last year's update that was based on the 2015 degree data had figures and percentages of degrees earned by non-resident aliens and race and ethnicity data for degrees granted to US citizens or residents.

The current Science Policy report focuses on degrees earned by women in the field of statistics and biostatistics. The report shows decade of increases from 1996 – 2005, the number of women PhD's in Statistics has begun to decline steadily since 2006. The in women receiving PhD's throughout the early part of the 2000's in line with the nearly consistent Masters and Bachelor degrees women during the reported timeframe.

#### AMSTAT NEWS

(http://magazine.amstat.org/blog/2017/10/01/degrees16/)

| Statistics Bachelor's Degrees    | 2012  | 2013  | 2014  | 2015  | 2016  | 2016          | 2016          |
|----------------------------------|-------|-------|-------|-------|-------|---------------|---------------|
| Purdue University                | 100   | 135   | 197   | 183   | 211   | 826           | 992           |
| UC Berkeley                      | 99    | 143   | 160   | 215   | 174   | 791           | 1,238         |
| U. of Illinois UC                | 52    | 67    | 91    | 111   | 143   | 464           | 606           |
| UCLA                             | 30    | 50    | 66    | 71    | 127   | 344           | 413           |
| UC Davis                         | 55    | 53    | 54    | 60    | 110   | 332           | 502           |
| Subtotal                         | 336   | 448   | 568   | 640   | 765   | 2,757         | 3,751         |
| Total                            | 1,390 | 1,714 | 2,019 | 2,367 | 2,851 | 10,341        | 16,739        |
| Statistics Master's Degrees      | 2012  | 2013  | 2014  | 2015  | 2016  | 2012-<br>2016 | 2003-<br>2016 |
| Columbia University              | 288   | 294   | 287   | 396   | 435   | 1700          | 3061          |
| The George Washington University | 29    | 67    | 155   | 118   | 132   | 501           | 580           |
| Rutgers University               | 62    | 79    | 94    | 96    | 106   | 437           | 872           |
| University of Illinois at Urbana | 36    | 61    | 67    | 41    | 75    | 280           | 556           |
| University of Michigan           | 47    | 55    | 46    | 57    | 74    | 279           | 584           |
| Subtotal                         | 462   | 556   | 649   | 708   | 822   | 3,197         | 5,653         |
| Total                            | 2,003 | 2,269 | 2,489 | 2,769 | 3,249 | 12,779        | 25,861        |
| Statistics PhDs                  | 2012  | 2013  | 2014  | 2015  | 2016  | 2012-<br>2016 | 2003-<br>2016 |
| North Carolina State University  | 14    | 20    | 12    | 17    | 19    | 82            | 239           |

| Total                           | 345 | 379 | 397 | 396 | 402 | 1,919 | 4,484 | I |
|---------------------------------|-----|-----|-----|-----|-----|-------|-------|---|
| Subtotal                        | 71  | 65  | 62  | 71  | 78  | 347   | 843   | l |
| The Ohio State University       | 13  | 9   | 13  | 10  | 13  | 58    | 128   | l |
| Pennsylvania State University   | 14  | 9   | 12  | 9   | 17  | 61    | 136   | l |
| University of Wisconsin         | 16  | 18  | 10  | 7   | 15  | 66    | 176   | l |
| Iowa State University           | 14  | 9   | 15  | 28  | 14  | 80    | 164   | l |
| North Carolina State University | 14  | 20  | 12  | 17  | 19  | 82    | 239   | I |



2012-

2003-

# **Research Park Honors Most Valuable Interns**

CHAMPAIGN – Research Park's most influential and valuable interns were honored on Thursday, July 27, 2017 at the Research Park Summer Intern Picnic. Almost 600 highly skilled students work for Research Park tenant companies, where they gain valuable work experience and make significant contributions to internal corporate research and development programs. They also are able to work on valuable projects and build their professional networks and personal skillsets with by being exposed to scenarios that cannot be learned in the classroom. The interns nominated for this year's intern awards represent a wide range of skills and backgrounds, and are all



students at the University of Illinois. A team of Research Park professionals evaluated all nominations and determined the finalists and winners.

During the event, 6 outstanding students won awards from categories that included: Best Entrepreneurial Leadership in a Startup, Most Advanced Marketing/Business Development, Best Technological Innovation, Most Competent and Collaborative Team, Most Valuable Undergraduate, and Most Valuable Graduate student employees. The selected students each received a trophy commemorating their achievement and a small gift from the Research Park.

The Department of Statistics was proud to announce that two Statistics students were recognized for their excellence during the Research Park Most Valuable Interns of 2017.

The honorees were:



#### **Roshen Samuel:**

Award Won: Most Outstanding Undergraduate Intern

**Description of Award:** Is dedicated to meeting the expectations and requirements of internal and external customers. Treats people with respect and inspires the trust of others. Works with a high level of integrity and is proactive in building relationships. Keeps confidence. Admits mistakes. Can find common ground and get cooperation with minimum noise. Works well as a member of a team - both in leader and member role.

About Roshen: Interned for AbbVie: Earning a degree in Economics and Statistics.

**Manager Comments:** "Roshen exemplified an ability to be comfortable with being uncomfortable. Roshen went above and beyond typical efforts to produce quality deliverables that delighted his clients. Beyond the specific efforts and outcomes, Roshen's overall impact to the organization is difficult to understate. Previously, AbbVie almost exclusively utilized our Innovation Center to augment some of our computer programming efforts. Nearly 100% of the students in the Center were pursuing Computer Science, Bioengineering, or similar studies. Roshen was the first student to join a new market research team and initiative that was seeking to utilize students to do market analysis on vendors and technologies that may be of interest to different organizations within AbbVie"-Masha Trenhaile



#### Wanxin Bai (Finalist)

Award: Best Technological Innovation

**About the Award:** Any intern who has helped with, independently created, or lead a team in developing solutions for the betterment of projects, process & tools / automation. Any Tasks that are self-driven like improving the processes, cost savings, improved efficiencies, out of the box thinking to solve business problems demonstrated through thought leadership.

About Wanxin: Intern at Gartner. Wanxin is a graduate student who is getting her masters in Statistics.

Manager Comments: "Wanxin's superior technical abilities and good work attitude have helped us deliver high-

quality products to our stakeholders. During our acquisition with Gartner, we were able to demonstrate some of the capabilities that Wanxin has created. Wanxin never backed off from taking new responsibilities and challenges. She has been very approachable to her junior interns and has been able to mentor them very effectively. Over all Wanxin has been an asset to our organization and we are super happy to have her as part of our team" – Imran Khan

### Mathematics and Statistics Graduates Reported to have Highest Average Salaries in Latest Illini Success Report

Young LAS alumni are more quickly finding jobs and other endeavors after graduation.

New graduates from LAS are increasingly successful at securing a first destination after college, according to the third annual release of a campus initiative to better understand young Illinois alumni. They continue to be in strong demand by employers. These results are according to the Illini Success initiative, a campus wide effort that launched in 2014 to gather career-related information about recently graduated bachelor's degree recipients. The latest report—released this week—includes data about 2016-17 graduates of Illinois based on survey responses, employer and college reports, and the LinkedIn social media network. This year's study reports that 86 percent of bachelor's degree recipients in LAS had secured a first destination—employment, continuing education, or volunteer/service positions—within six months of graduation. Last year, the Illini Success report indicated that 83 percent of LAS graduates had secured first destinations. The figure was 77 percent two years ago.



"Clearly, we are thrilled by the implications of the latest Illini Success initiative," said Feng Sheng Hu, Harry E. Preble Dean of the College of LAS. "The vast majority of our young alumni are engaged in new, productive endeavors very soon after graduation. It speaks to the value of an LAS degree, and we expect the success of our alumni to continue to grow as their lives and careers develop."

About 66 percent of LAS graduates reporting a first destination were employed. Healthcare, investment and finance, higher education, K-12 education, and the food and beverage industries were among the more frequent employment destinations by LAS graduates. The average annual salary of new LAS graduates in the study is \$53,226, up from \$48,981 last year. New LAS graduates' average salary is the third-highest on the Illinois campus, after graduates from the colleges of Engineering and Business.

Of 3,130 LAS bachelor's degree recipients from 2016-17 (including those from the August 2016, December 2016, and May 2017 graduations), the latest report includes data for 2,021 graduates, or 65 percent of the total. About 13 percent of new LAS graduates reported receiving signing bonus. Those bonuses averaged \$6,892, compared to an average of \$5,960 last year. Of the 2016-2017 LAS graduates who continued on to graduate school, 56 percent are pursuing master's degrees, 17 percent are pursuing professional degrees (law or medicine), and 15 percent are pursuing doctoral degrees. About 45 percent are continuing their education in Illinois.

About 87 percent of 2016-17 LAS graduates participated in one or more experiential learning opportunities at Illinois, up from 80 percent last year. Those opportunities included internships, assistantships, student teaching, service learning/volunteering, study abroad with internship or practicum component, clinical experience, co-op, or field experience with a practicum component. All of those who participated in an experiential learning opportunity ranked these experiences as "very helpful" or "helpful." About 21 percent of LAS graduates who participated in these opportunities received a full-time job offer as a result.

Career data has important implications, from addressing the questions and concerns of prospective students to answering accreditors who are measuring institutional quality. Federal and state governments are asking for more information about the value of a college education, and making comparisons that can potentially be tied to funding of higher education institutions. The Illini Success initiative was spearheaded by The Career Center, but it quickly gained support from units all across campus, including the Office of the Provost, the Division of Management Information, and the Office of the Registrar, the Institutional Review Board Office, the Career Services Council, the Council of Undergraduate Deans, and all undergraduate colleges on campus.

Other items of note include:

- 20 percent of respondents in the survey self-identified as first-generation college students.
- 81 percent of communication majors reported their first destination as employed, the largest of any major. Second was English and creative writing at 78 percent.
- 48 percent of astronomy and physics majors reported their first destination as continuing education, the highest of any major. Second was psychology (41 percent) and then biological sciences (37 percent)
- Of the full-time employed graduates, those in mathematics and statistics reported the highest average salaries at \$68,118. Next was astronomy and physics at \$67,491.

Original article written by Dave Evensen (Senior Editorial Specialist - LAS)

### Bohrer Memorial Student Workshop in Statistics

The Robert Bohrer Memorial Student Workshop in Statistics is held each year at the I-Hotel & Conference Center. In addition to keynote speakers who are leaders of their field, students are invited to give presentations of their area of research during the event. The Bohrer Workshop was established in 1994 with support from donations by faculty, students and friends of Professor Robert E. Bohrer to honor his inspiring life and career, and his commitment to students.

In 2017, the Robert E. Bohrer Memorial Student Workshop was proud to host Professor Nancy Reid of the University of Toronto and Professor Edward George of the Wharton School at the University of Pennsylvania. Professor Reid delivered the Wijsman Lecture while Professor George gave the Bohrer Lecture. Nine PhD students, including Fan Yang, Mengjia Yu, Albert Man, Xiao Su, Lingrui Gan, Fei Xue, Mark Fredrickson, and Yanglei Song were invited to give research presentations during the event.

As winner of the Horace W. Norton Prize for outstanding thesis research in Statistics, PhD student, Yunbo Ouyang was invited to give the Norton Lecture. PhD Student Wei Han was awarded the Outstanding Qualifying Exam Award in recognition of excellence in academic performance during the 2017 Doctoral Qualifying Exam.





### JSM 2017Alumni and Friends Reception

The 2017 Joint Statistical Meeting (JSM) was held in Baltimore, Maryland from July 29 through August 3 this past year. University of Illinois Department of Statistics friends and alumni were invited to attend the Department of Statistics Alumni and Friends Reception to mingle with friends and colleagues alike. The reception is a great way for attendees of JSM to gather after a full day of events. JSM is one of the largest statistical events in the world with more than 6,000 attendees from 52 countries and over 600 sessions with topics ranging from statistical applications to methodology and theory to the expanding boundaries of statistics, such as analytics and data science.

JSM also offers a unique opportunity for statisticians in academia, industry, and government to exchange ideas and explore opportunities for collaboration. Beginning statisticians (including current students) are able to learn from and interact with senior members of the profession.

### Tech Plaza Open House

Some big changes were in store for the Statistics Department during the 2017-2018 Academic Year! PhD students and Emeritus faculty members got an upgrade on their surroundings as the Green Street Tech Plaza suite was renovated and expanded upon, allowing faculty and students who were originally housed at the Nevada House located towards the Southeastern corner of campus to move into a new professional environment in the heart of Campus Town. New offices, new equipment and all in a prime location on Green Street, the students and faculty were very excited for their new location this past fall.

The Tech Plaza Open House held on October 20, 2017 had a secondary function in addition to welcoming everyone to the new office location as Administrative Aide, Melissa Banks was honored for 10 Years of Service to the University of Illinois. Melissa's hard work and dedication over the years is a testament to the success of the Statistics Department, and nowhere better to honor her commitment to the University than the Tech Plaza Open House as she spearheaded the project from start to finish. Melissa's constant push to improve and move the Department forward is a true asset to the Department and the University.







# Graduate Student Invited Speaker Seminar Series

The 2017-2018 Academic Year also saw the start of the Graduate Student Invited Speaker Seminar Series. Each semester the Graduate Students of the Department of Statistics will invite speakers to present a seminar on topics they are specifically invested in. The inaugural seminar had Professor Jianqing Fan of Princeton, University visit the Department of Statistics on April 19, 2018 to give a statistics seminar as well as meet with current PhD students to discuss research interests.

Jianqing Fan is a statistician, financial econometrician, a data scientist, as well as the Frederick L. Moore '18 Professor of Finance, Professor of Statistics, and Professor of Operations Research and Financial Engineering at Princeton.







# Bo Li Goes to Washington!

The ASA Advisory Committee on Climate Change Policy and the Section on Statistics and the Environment sent four statisticians to the eighth annual Climate Science Day (CSD) on Capitol Hill at the end of January. Peter Bloomfield, Dorit Hammerling, and Leonard Smith were return CSD participants, while Bo Li participated for the first time.

CSD's purpose is to connect scientists with congressional lawmakers and their staffs to discuss climate science, a purpose that is quite broad considering the wide range of views and interests across the 50 states and 435 congressional districts. The scientists attended a series of briefings earlier in the day to prepare them for this range. The briefings included a discussion with a panel of Hill staffers, tips for Hill visits, strategies for communicating about climate science, a keynote speaker, and time for each team—two scientists of different disciplines and a science society staff person—to prepare specifically for their meetings. This year's keynote speaker was Laura Helmuth, the health, science, and environment editor at The Washington Post.



Bo Li with teammate Rachel Kirpes outside the Capitol

With a goal for productive, engaging discussion, the request made to

congressional offices in the past was to consult CSD participants or the sponsoring organizations when they had questions regarding climate science. This year, however, CSD participants were encouraged to focus on connecting the mainstream scientific view with current and potential future impacts of climate change in their districts for offices that have not yet acknowledged the scientific community's view of climate change as, for example, was stated in the 2016 letter signed by 31 scientific organizations, including the ASA.

For offices whose views were more congruent with the mainstream scientific view, the discussions were about being a resource and the risks specific to the district/state.

The 19 2018 CSD participants—sponsored by 10 science associations—collectively had 70 meetings. As reported last year, participants again noted the changing tone of climate change discussions in many offices. Where once there was polite, but short and nonengaging discussions, there was more open discussion about the impacts of climate change in the district or state and even the political challenges.

Hammerling, who participated in her second CSD, also mentioned she enjoyed the interaction with other CSD scientists and the preparatory briefings. Li commented on the importance—as part of a scientist's responsibility to society—of regular communication with policymakers and providing updates from the research community about new discoveries and developments.

# Martin Luther King: Statistics

MLK:STAT (Martin Luther King: Statistics) was co-founded by Dr. Malaika McKee (African American Studies) and Dr. Steven Culpepper (Statistics) to accomplish two objectives. First, to broaden the pipeline of historically marginalized and under-represented students in the fields of statistics and data science. Second, to engage in the intellectual work of Statistical Humanism, a concept that McKee and Culpepper have coined to connect the importance of statistical literacy and training for maintaining democracy.

With assistance from Dr. Chris Kinson (Statistics), MLK:STAT has assembled a collaborative lab setting where University of Illinois students, Urbana High school students and University of Illinois faculty build an appreciation for the historical understanding of civil rights, democracy, and civic engagement through statistical work. Current projects are engaged in text mining, R-Coding, and sentiment analysis of select King speeches.



Dr. Malaika McKee African American Studies

Dr. Steven Culpepper Statistics

### Illinois Undergraduate Research Week

Undergraduate Research Week is an annual celebration of student innovation and excellence that showcases the best of undergraduate research at the University of Illinois. Campus events include workshops on getting started in research, special exhibits, and colloquia sponsored by individual departments, programs, and units, highlighting the best of our students' work. The Undergraduate Research Symposium, a daylong signature event, brings together hundreds of students from all academic disciplines to share their research through oral panels, poster presentations, and performances. These students and their projects take on the important issues and questions of our time, and hold the potential to change the world for the better.

The Department of Statistics had 11 participants in the 2018 Undergraduate Research Week, which was held from April 15 -21.

Since 2008, the University of Illinois has held the signature event of the Undergraduate Research Week, the Undergraduate Research Symposium (URS). The number of undergraduate students participating has grown from a few hundred in its inaugural year to well over 800 students (as of Spring 2017). Over the course of the day, students present their work in concurrent oral and poster presentations (including creative performances), the breadth and scope of which reflect not only the wide range of academic disciplines at the University of Illinois, but also speak to the caliber of our undergraduates. Our students are innovative and engaged, eager to learn from their advisors and mentors. Their projects also demonstrate the ongoing institutional commitment to supporting and expanding research opportunities at the U of I and beyond.

#### **Undergraduate Statistics Student Presentations**

Rohan Dalmia, Junior, Statistics Christina Chen,, Sophomore, Systems Engineering & Design <u>Comparing Logit-regressions to ANOVAs in Analyzing Binary</u> <u>Psycholinguistic Data</u>

Pengyu Chen, Senior, Statistics & Computer Science Hao Qiu, Junior, Statistics Ruorong Yin, Senior, Statistics Will I get Admitted? Statistical Analysis of Graduate School Admission

Xiaoru Dong, Senior, Statistics Jingyi Xie, Junior, Statistics Analyzing Inclusion Criteria of 7000 Cochrane Systematic Reviews

Srivathsan Subramanian, Sophomore, Statistics Prajakti Jinachandran, Sophomore, Mathematics & Computer Science Jayanti Supransh Murty, Freshman, Computer Engineering Ho Yin Au, Senior, Mathematics & Computer Science <u>Generating Language on Twitter</u>

Edmond Kim, Senior, Statistics Demographic Description of Hispanic Immigrants in Rural America

Xiaoru Dong, Senior, Statistics Tianying Zhou, Senior, Statistics Manting Huang, Junior, Statistics Distortions in Scientific Literature - A Replication Analysis of Greenberg's Citation Network of 302 Alzheimer's Science Research Papers

Pasqua Ruggiero, Sophomore, Statistics One Day through Stranger Trauma

Bharat Bojja, Freshman, Statistics & Computer Science Analyzing Consumer Sentiment with Dysfunctional Brand Communities

# 2018 UIUC AXIS ORMIR Student Challenge



Statistics undergraduate student, Shuyuan (Holiday) Tang, along with two Actuarial Science students were the winning team of the 2018 UIUC AXIS ORMIR Student Challenge. When asked what helped prepare him for the challenge, Holiday mentioned that "being a Stat Major and working under Ellen Fireman and Karle Flanagan for STAT 200" was a good start.

Announced on January 7, 2018, AXIS Research Center at the Research Park and the Office of Risk Management and Insurance Research (ORMIR) announced the 2018 AXIS/ORMIR Student challenge. The challenge concluded on April 10, 2018.

University of Illinois student were challenged to create solutions to real-world business challenges facing the Insurance/Reinsurance industry over the duration of the competition. According to Holiday, "the challenge was to create a user-friendly distribution-fitting utility capable of fitting multiple probability distributions and outputting a variety of data-visualizations and goodness-of-fit statistics."

Information sessions were held throughout the competition to provide students with basic understandings of insurance and reinsurance concepts and to gauge their progress.

Participants were given the opportunity to interact with company representatives, learn insurance and business principles and practices and see real-world application of the academic endeavors. Final products were then presented to AXIS Executives who judged the teams' projects and determined the winners of the competition. The winning entry was then recognized by AXIS and ORMIR in April.

### 2018 Synchrony Financial Datathon

Hosted by the Illini Statistics Club and in partnership with Synchrony Financial, the 2018 Synchrony Financial Datathon was held from April 13th – April 15th, 2018 on the University of Illinois Urbana-Champaign campus. Synchrony Financial sponsored the Datathon for students interested in predictive analytics and data science. The Datathon kicked off on Friday, April 13<sup>th</sup> with a dinner and an information session in the Digital Computer Lab. Statistics Professor and Department Chair, Douglas Simpson delivered the keynote speech on Friday evening.

Participants of the Datathon were given a dataset and a set of problems to solve using various predictive analytics and data science techniques and were given until the morning of



April 15<sup>th</sup> to present their solutions to a panel of judges. The Synchrony judges then chose two winning teams: one undergraduate team and a graduate team with the members of both teams winning Apple Watches as prizes from Synchrony Financial. The Datathon question posed to the student teams was 'What will be the impact on home improvement spending when the Fed increases interest rates?'

Synchrony hosted a series of workshops on Saturday, April 14<sup>th</sup> to provide students with introductory resources in obtaining the working knowledge of the topics at hand. The workshops Synchrony held covered topics such as: Data Visualization with Tableau, Data Engineering in Hadoop, Basics of SQL, and Basics of Machine Learning. Ujjval Patel, Dan Comenduley, Cheng Qian, Connor Dunn, and Jennifer Cantor of

Synchrony were on hand during the Datathon to host the workshops and to serve as judges for the Datathon competition.

Statistics faculty members, Christopher Kinson and Bo Li both served as judges alongside Synchrony employees, Jennifer Cantor, Cheng Qian, and Connor Dunn.

The judges for the competition had to review all of the competitors' slideshow presentations and deliberate about the merits and end results of the competitors' projects before collectively choosing winners for the various categories. In the end, the competition winners for Best Presentation were graduate students Tianyue (Andy) Mao and Albert Man and undergraduate students Huanhuan Yue and Yiwei Zhang.

When asked about the experience of participating in the Datathon, Statistics PhD student, Albert



Pictured left to right: Jennifer Cantor, Cheng Qian, Tianyue (Andy) Mao (MS), Connor Dunn, Albert Man (PhD), Huanhuan Yue (Senior), Yiwei Zhang (Senior), Assistant Professor Chris Kinson, Professor Bo Li

Man said, "I liked the business problem Synchrony provided, which was to find the effect of an increase in Federal Interest Rate on Home Improvement Spending. We were not provided with any datasets, so it was a good experience in end-to-end problem solving, from choosing which data to scrape, all the way to answering the business question with a presentation."

"I was very happy to be awarded the Best Presentation award, and I think it was a culmination of a lot of hard work and practice," Albert added. Albert contributed the team chemistry as being a major factor to the success of the competition. This was the third datathon various members of the group had worked together and the second one they did as a whole team.

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Yiwei Zhang, had this to say about participating in the event, "competing in the datathon was a great experience learning from people from different fields. Coming from a statistics and psychology background, I'm used to approaching problems from the demographic and statistical perspective. However, hearing candidates from business or engineering presenting their solutions really amazed me by the scope of factors they considered. Students at our university are amazing because they are diverse and special in their own way. This "peer pressure" is what constantly motivates me to go out of my comfort zone and achieve higher than I could."

Yiwei added that she really enjoyed participating in the datathon because of the specific question



they had to work on but were also given enough freedom to come up with their own sub-questions to solve the big problem. The structure really pushed competitors to think on their feet and tackle challenges as they came along the way.

Tianyue (Andy) Mao said that out of all of the datathons he has participated it in, this one was very unique in that it was up to the participants to find their own data and make predictions. This challenged participants to find reliable sources in order to find reliable data to use from the internet. "My teammates and I have been through several data competitions and it feels great bringing home a win after honing our strategies and preparations," Andy said about being a part of the winning team.

According to Huanhuan Yue, the competition was structured in a way that it combined both the need of technical skills and business strategy. "As many of us are planning to work in corporate as either data analyst or business analyst, this [was] a great opportunity where we get to execute what we learn in class and apply them into real world problems," Huanhuan said of the competition.

The competition wasn't all hard work though for Huanhuan, working with three of her close friends for the competition they were able to make it fun while working on the challenge. Already being friends with one another, the winning team already knew each other's strengths and were able to build on that for the competition. They were able to focus on what they were good at and amplify their strong points during the datahon as they worked together. "Two of us were good at the business side so we focused on feature engineering and making the slides to tell the stories while the other two mainly worked on the modeling part. Overall it was a great experience with friends!" Huahuan said.

#### SYNCHRONY OPENS EMERGING TECHNOLOGY CENTER AT RESEARCH PARK

The University of Illinois announced on April 12 that Synchrony Financial was opening the Synchrony Emerging Technology Center at the University of Illinois Research Park. The Emerging Technology Center is designed to focus on advancing Synchrony's finance and technology capabilities as well as provide real-world skills for students in artificial intelligence, data science, humancentered design and other emerging technologies.



"Developments in artificial intelligence and machine learning have the potential to reshape entire industries. The key for the financial services and retail sectors now lies in understanding how to best harness these technologies to solve real-world problems and deliver better hyper personalized customer experiences," said Greg Simpson, Chief Technology Officer and Artificial Intelligence leader at Synchrony. "By bringing together the sharpest minds from Synchrony and the University of Illinois, we now have the ability to accelerate the development of these artificial intelligence solutions while building our pipeline of technology talent."

Ujjval Patel, VP of Technology at Synchrony, is tasked with recruiting and training student talent for the Emerging Technology Center. Student in the program will work with Synchrony technology experts to commercialize solutions for the company's partners. Projects can range across multiple disciplines, such as market and technology research, big data analytics, proof-of-concept creation, data visualization, and software development.

Sections of this article originally appeared in a Research Park press release. Special thanks to all contributing partners.

### Awards and Recognition

### **Douglas Simpson Named AAAS Fellow**



Douglas Simpson, Professor and Department Chair of Statistics at the University of Illinois at Urbana-Champaign was awarded the distinction of Fellow from the American Association for the Advancement of Science (AAAS) in November, 2017. Professor Simpson was awarded the honor for distinguished contributions to the field of robust statistics, emphasizing generalized regression modeling and functional data, and for translational innovations in risk analysis.

A member whose efforts on behalf of the advancement of science or its applications are scientifically or socially distinguished and who has been a continuous member for the four year period leading up to the year of nomination, may, by virtue of such meritorious contribution be elected a Fellow by the Council. Examples of areas in which nominees may have made significant contributions are research; teaching; technology; services to professional societies; administration in academe, industry, and government; and communicating and interpreting science to the public. Fellows are elected annually by the AAAS Council from the list of approved nominations from the Section Steering Groups.

AAAS recognized the awarded members at a ceremony on February 17, 2018 at the 2018 AAAS Annual Meeting held in Austin, Texas.

### Yuguo Chen Named ASA Fellow



Professor, Yuguo Chen has been selected as a Fellow of the American Statistical Association (ASA) for 2018. The designation of ASA Fellow has been a significant honor for nearly 100 years.

Individuals are nominated by their ASA-member peers. Nominees must have an established reputation and have made outstanding contributions to statistical science. The Committee on Fellows evaluates each candidate's contribution to the advancement of statistical science based on published works, membership and accomplishments in other societies, and professional activities. It's a distinction only conferred upon one-third of one percent of the ASA's membership.

Fellows are to be officially recognized at an awards ceremony at the 2018 Joint Statistical Meeting (JSM), which will be held in Vancouver, Canada from July 28 - August 2.

### Annie Qu Named Brad and Karen Smith Professorial Scholar



Professor Annie Qu, has been named a Brad and Karen Smith Professorial Scholar starting May 2017. The position is intended for individuals with expertise and academic abilities in the mathematical sciences. The professorial scholar title was made possible by a generous donation by Brad and Karen Smith to the College of Liberal Arts & Sciences in support of faculty excellence.

Several outstanding professors in the College of Liberal Arts & Sciences were selected by their peers to receive named professorial positions, which provide financial assistance to support their research and teaching duties.

Feng Sheng Hu, the Harry E. Preble Dean of the College of LAS, said the new appointments are a point of pride for the College of LAS. "These named positions have been created by people who care deeply for the future of the liberal arts and sciences at Illinois, and the appointees are dedicated to their disciplines, the college and university, their colleagues, and their students," said Hu, previously of past appointees. "We're grateful for them and their good work."

### Awards and Recognition

### **Dave Zhao Recipient of LEAP Award**



Sihai Dave Zhao of the Department of Statistics was named one of four recipients of the Lincoln Excellence for Assistant Professors (LEAP) Award by the College of Liberal Arts & Sciences at the University of Illinois. The LEAP Award is granted to faculty based on scholarly productivity and contributions to the educational mission of their departments and the college.

The recipients were nominated by executive officers in departments across the college, and they were selected by a committee of senior distinguished faculty across several units.

"The LEAP Scholars represent a bright future for the College of LAS," said Feng Sheng Hu, the Harry E. Preble Dean of the College of LAS. "They are exemplary teachers and researchers, and I am confident that they will continue to develop into strong leaders in their fields and on campus."

After receiving his bachelor's, master's, and doctoral degrees from Harvard University, Zhao came to Illinois in 2014 to serve as an assistant professor in statistics. Zhao also works as a faculty affiliate at the Carl R. Woese Institute for Genomic Biology where he researches gene networks in neural development and plasticity and computing genomes for reproductive health. Other research topics Zhao studies include statistical genomics, high-dimensional statistics, and survival analysis

### **Xiaohui Chen Receives NSF Career Award**



Professor Xiaohui Chen was awarded the prestigious National Science Foundation (NSF) CAREER Award for his work titled as "Computer-Intensive Statistical Inference on High-Dimensional and Massive Data: From Theoretical Foundations to Practical Computations."

NSF CAREER awards are one of the most distinguished awards a junior faculty member can receive as the recipient has to demonstrate an exemplary regard to the role of teacher-scholar through integrating research and education within the context of their organization's mission statement.

NSF grants these highly competitive awards only once a year to early-career faculty whose activities have built a firm foundation for a lifetime of leadership in combining education and research.

### **Bo Li Receives Associate Research Appointment**



Department of Statistics Professor, Bo Li was selected for the prestigious Associate Research Appointment in the Center for Advanced Study (CAS) for the 2018-2019 academic year. Each year, the tenured and untenured University of Illinois faculty are invited to submit scholarly or creative proposals for consideration by the Center's permanent Professors. Faculty members with winning proposals are appointed Associates and Fellows and awarded one semester of release time to pursue their projects in the coming academic year.

Professor Li's research will focus on the prediction of new human immunodeficiency virus (HIV) diagnosis rates at the county level using publicly available data. The research proposes a powerful Bayesian hierarchical models (BHM) to integrate the Poisson sampling distribution and the temporal dynamic pattern of HIV while taking the spatial dependency into consideration.

In accordance with the Center's mission, these appointments provide an incentive to pursue the highest level of scholarly achievement. They also provide faculty members with an unusual opportunity to explore new ideas and demonstrate early results.

### Awards and Recognition

### **Ruixuan Zhou Selected for ASA Student Paper Award**



Ruixuan (Rachel) Zhou, Statistics student at the University of Illinois at Urbana-Champaign, has been selected as one of the recipients of the 2018 ASA Section of Statistics in Genomics and Genetics (SGG) Distinguished Student Paper Awards. This award is given out annually to only three to six eligible recipients who are current undergraduate or graduate students at any level as well as be SGG section members with the American Statistical Association (ASA).

Ruixuan (Rachel) Zhou graduated from the MS: Statistics program in May of 2018 and will be continuing her education at the University of Illinois Urbana – Champaign as she was accepted to the Statistics PhD program effective Fall 2018.

### Fei Xue Winner of SLDS Student Paper Award



Fei Xue, fourth year Statistics PhD student, was selected as a winner of the 2018 Statistical Learning and Data Science (SLDS) Student Paper Award for her paper entitled "Variable Selection for Highly Correlated Predictors".

The SLDS of the American Statistical Association (ASA) sponsored a student paper competition for the 2018 Joint Statistical Meeting (JSM) that will be held in Vancouver, Canada, on July 28-August 2, 2018. Papers submitted to the SLDS for consideration must be original theoretical, methodological, or applied, research that used principles of statistical learning and data science.

### Lingrui Gan Winner of SBSS Student Paper Competition



Lingrui Gan, fourth year Statistics PhD student, was selected as a winner of the 2018 Section on Bayesian Statistical Science (SBSS) Student Paper Competition and will be among the possible candidates to win the Laplace Award, presented at the Joint Statistical Meeting (JSM) held in Vancouver, BC from July 28-August 2, 2018. The American Statistical Association (ASA) sponsored the student paper competition on Bayesian methodology, which includes applied, computational, or theoretical work. The winner of the SBSS Laplace Award will be announced at JSM and will be awarded to one of nine students who have been awarded the SBSS travel award.

### Lingrui Gan Receives Dissertation Completion Fellowship

Lingrui Gan was awarded the prestigious Dissertation Completion Fellowship award from the Graduate College for 2018 at the end of May 2018. There were a total of 78 nominations submitted from 48 departments from across campus, with 22 nominees selected for this award. The award comes with a one year fellowship designed to allow the recipients to finish their doctoral studies within the next year of study.

The competition included two two stages of review. Each nomination was first reviewed by one of the Fellowship Board's four Area Committees, then finalists were reviewed by the Executive Committee. Each Area Committee is comprised exclusively of faculty members; the Executive Committee is comprised of faculty along with two graduate students.

# Awards and Recognition Statistics Faculty Ranked as Excellent

Each semester, the Center for Innovation in Teaching & Learning (CITL) compile and release a list of teachers ranked as excellent as reflected on student ratings of instruction. The ratings are based on Instructor and Course Evaluations (ICES) questionnaires that are maintained by Measurement and Evaluation, CITL. Only instructors who use the ICES forms to have their students evaluate their courses are considered in these measurements.

To be considered for the *List of Teachers Ranked as Excellent by Their Students*, faculty must meet certain score requirements on the ICES forms. Staff with the Measurement and Evaluation of the Center for Innovation in Teaching and Learning compile the results of the forms to determine that faculty both meet the requirements for "instructor's overall teaching effectiveness" and "overall quality of the course". Teaching Assistants are only required to meet one of the items.

The Department of Statistics had several instructors, both faculty and teaching assistants, ranked as excellent by their students throughout the Spring 2017, Summer 2017, and Fall 2017 terms (Spring 2018 term unavailable at time of reporting).

#### The faculty listed as excellent is as follows and is listed in alphabetical order:

#### Fall 2017

Mauricio Campos, TA, STAT 400 Yuguo Chen, STAT 525 David Dalpiaz, STAT 400 Ellen Fireman, STAT 100 Karle Flanagan, STAT 100 \* Mark Fredrickson, TA, STAT 400 \* Yutong Li, TA, STAT 400 Joshua Loyal, TA, STAT 400 Danielle Sass, TA, STAT 100 Austin Warner, TA, STAT 400

\*Denotes Outstanding Rating

#### Special recognition:

#### Summer 2017

David Dalpiaz, STAT 420 Karle Flanagan, STAT 100 Danielle Sass, TA, STAT 400 \* Alex Stepanov, STAT 400, STAT 410



#### Spring 2017

Serena Chan, STAT 448 Yuguo Chen, STAT 511, STAT 525, STAT 595 David Dalpiaz, STAT 430 Georgios Fellouris, STAT 554 Ellen Fireman, STAT 100 Karle Flanagan, STAT 100 Sarah Formentini, TA, STAT 400 Darren Glosemeyer, STAT 448 Annie Qu, STAT 427 Danielle Sass, TA, STAT 400 Alex Stepanov, STAT 430 Albert Yu, TA, STAT 200

David Dalpiaz; ranked excellent consistently through Spring 2017, Summer 2017, & Fall 2017 for work in STAT 430, STAT 420, STAT 400 Karle Flanagan; ranked excellent consistently through Spring 2017, Summer 2017, & Fall 2017 for work in STAT 100 Danielle Sass; ranked excellent consistently through Spring 2017, Summer 2017, & Fall 2017 for work in STAT 400 STAT 100 Yuguo Chen; ranked excellent in three 500 level courses in the same Spring 2017 term for work in STAT 511, STAT 525, STAT 595

# Karle Flanagan Wins Teaching Excellence Award



The Illinois Student Government hosted their annual Teaching Excellence Awards banquet on Sunday, April 22, at the Illini Union. The Illinois Student Government's Teaching Excellence Awards is a completely student run effort to recognize and thank excellent instructors at the University of Illinois at Urbana-Champaign campus. This year, Statistics Instructor, Karle Flanagan was honored with this award at the banquet.

Karle was nominated by members of the student body for her positive impact on the academic experience of students who have been enrolled in the STAT 100 courses over the past Academic Year. This award is the highest honor that the student body has for educators at the University. In addition to the award and the banquet where other Illinois faculty were honored, Karle's name will be added to the Teaching Excellence Awards plaque that hangs in the Senate Complex of the Illini Union.

In addition to instructing over a thousand students in STAT 100 over the course of the 2017-2018 Academic Year, Karle also serves as the Statistics Undergraduate Minor Advisor for approximately 125 – 150 students at any given time. Karle is also the Advisor for the Data Science Certificate offered through the Statistics Department for

undergraduate students. Since its inaugural term offered in Spring 2017, the Data Science Certificate has been awarded to 19 students and has seen a steady increase in interest each term it has been available.

# New Website Launched with New Features

In the Fall of 2017, the Department of Statistics embarked on a new journey; the complete relaunch of a new website. Along with migrating all of the current web pages that made up the old Statistics website, new content was created in order to make the new site more user-friendly while offering additional resources not available with the older site. With the assistance of the Applied Technologies for Learning in the Arts & Sciences (ATLAS), the Department of Statistics finally launched their new site in mid-November.

In addition to the traditional information present on the website such as admissions and academics, the new site put a strong focus on recruitment with a 'Student Life' section that gave potential applicants a sense of the community of both the department itself and of Champaign-Urbana.

With almost every industry employing statisticians and data scientists of some capacity, there was an ever growing demand from potential and current students of statistics to know what exactly they could do with a degree in statistics and what to



expect after graduation. The new website helped answer these questions with a new 'Career in Statistics' section that focused on annual reports and, conveniently enough, statistics of the various industries graduates of every level could possibly expect to find jobs in after graduation. From median pay levels, entry-level education requirements, internships, career fairs, and several other areas of career interests, the new 'Career in Statistics' section made it easier than ever for students to get a better idea of where their future could lead.

Another exciting section included with the new website that borrows from the question "what can I do with a degree in statistics" was the 'Alumni Spotlight' page. The 'Alumni Spotlight' helped answer the very question of what one can do with a degree in statistics as it asked the Department of Statistics alumni about their experiences while in the various programs offered and how their program lead them to their current careers. The response to the Alumni Spotlights was outstanding and well received by alumni who were approached to participate. If you are an alumni and would like to participate in the Alumni Spotlight feature, please send an email to Stat-Office@Illinois.

# Alumni Spotlight

JEFFREY LIU, DATA SCIENTIST, GOOGLE

Jeffrey Liu is a 2013 PhD recipient from the Department of Statistics at the University of Illinois Urbana-Champaign. He is currently a Data Scientist at Google working on search quality systems and analytics for the tech giant search engine.

Jeffrey works on search quality evaluation: he develops systems, experiments, and metrics to measure and help improve Google's search quality. His favorite part is that there is tons of data (think about billions of users and queries) to feed the analysis (various kinds of slicing and dicing, modeling, prediction, etc), which can sometimes be a luxury to a statistician. It's also rewarding to see that the insights from the data analysis will directly help improve search quality and benefit users.

"Having a PhD from our Stats Department was a very important factor to getting my job. Aside from that, a combination of stats thinking skills, practical data analysis experience (courses, internships or prior work), the ability of clear technical communication, and a bit of luck," – Jeffrey Liu



# Recent PhD Alumni, Placements, Thesis Titles & Advisors

#### Jianjun Hu

Credit Risk Analyst, Union Bank Statistical Methods for Learning Sparse Features Advisor: Feng Liang

#### Lyndsay Shand

Senior Statistician, Sandia National Laboratories Methods and Applications for Space-Time Data Advisor: Bo Li

#### Sangbeak Ye

Assistant Professor, University of Missouri-Kansas City Sequential Mastery Detection and Bayesian Learning Promotion under Cognitive Diagnostic Models Advisor: Jeffrey Douglas

#### Yinghan Chen

Assistant Professor, University of Nevada-Reno Developing Monte Carlo Methods far Binary Tables with Applications to Network Motif Detection, Q-matrix Estimation, and Learning Trajectories Advisor: Steven Culpepper

#### Weihong Huang

Data Scientist, Facebook Statistical Algorithms Using Multisets and Statistical Inference of Heterogeneous Networks Advisor: Yuguo Chen

#### Xichen Huang

Quantitative Analyst, Google Inc. Fast Algorithms far BC!Jesian Variable Selection Advisor: Feng Liang

#### Christopher Kinson

Visiting Assistant Professor, University of Illinois at Urbana-Champaign Longitudinal Principal Components Ana/ysis for Binary and Continuous Data Advisor: Annie Qu

#### Chung Eun Lee

Assistant Professor, University of Tennessee Statistical Inference of Multivariate Time Series and Functional Data Using New Dependence Metrics Advisor: Xiaofeng Shao

#### Yeon JooPark

Visiting Assistant Professor, University of Illinois at Urbana-Champaign Effect Size Estimation and Robust Classification far Imgular Sampled Functional Data Advisor: Douglas Simpson

#### Subhadeep Paul

Assistant Professor, Ohio State University-Main Campus Consistent Community Detection in Uni-Icryer and Multi-Icryer Networks Advisor: Yuguo Chen

#### Xiwei Tang

Assistant Professor, University of Virginia-Main Campus Individualized Learning and Integration for Multi-modality Data Advisor: Annie Qu

#### Shun Yao

Associate, Goldman Sachs Group Advisor: Xiaofeng Shao

#### Xiaolu Zhu

Research Scientist, Amazon.com Inc Heterogeneity Modeling and Longitudinal Clustering Advisor: Annie Qu



### Degree Recipients 2017-2018

#### **B.S.** in Statistics

Lucas Thomas Damien Aleck Alexander T. Athitakis Mitchell Forrest Babendir Joseph Fedele Bajo Joseph C. Best Varun Bhoopalam Hao Chen Y iyan Chen Zhichen Chen Nathaniel J. Cho Young Eun Choi Young Jun Choi Daniel D. Chung **Reid Williamson Cleveland** Michael S. Cochran Brianna N. Collender Kodi N. Collins Nicholas G. Corrie Anuj Dahiya Ryan H. Dunlavy Michelle Lindsey Fairow Kexin Fei Xinyu Fei Shan Gao Connor W Gleason Adrian Gonzalez Leah A. Gortowski Chenchen Gu Zhaoming Guo Liu Han Zhenling Hong Tieran Hu George Y Hwang YafeiJian YaqiJiang Min Jin Rahul D. Kalluri Brittany L. Kane Rahul S. KanianchaW Numan Karim Ryan J. Kenna Dongyoung Kim Ji Hoon Kim Joshua M. Kim

### B.S. in Statistics and Computer Science

Oviya Arasu Johnny Y Chang Augustine Chiu Christopher Danhee Choi Varun Daga Xinhe Geng

Min Soo Kim Suk Won Kim Jiangiu Kong Trevor P. Kuehr Mengxuan Lang Benjamin Seungbin Lee Chaewon Lee Justin Lee Kate Soyoung Lee Andrea W Leung Bingyi Li Cheng Li Meili Liang Mingiang Liang Jie Lin Jiaxin Liu Jiaxin Liu Peiwen Liu Brandon C. Loebbaka Anthony H. Lu Chloe Ke Ma Andrew B. Malter Tianyue Mao Jennifer Florence Marks Benedicto Buenaventura Canete Medina Prentice Mui Cirina R. Nevarez Zhourui Ni Samuel Michael Niemiec Benjamin Haydon Olson Kristin M. Osakada Rui Pan Juyeon Park Minseok Park Yeli Park Lavena Mulya Patra Alexandra Anne Peltier Alex J. Poppen **Zixuan** Oian Anshuman Saxena Geoffrey Segal Hyojin Seol Xiaolong Shen Hao Sheng

Lijin Guo Qiongjiao Huang KejiaJiang Arpit Singh Khanuja Krishna Lal Jason Lin Yushuo Lin Parth S. Patel Drake E. Reeser Sagar H. Sheth Yiming Shi Shannon E. Sledz Nigel Smucker Aditya Subramanian Kevin Michael Suchy Kexue Sun Zhen Sun Huan Tan Junyi Tang Albert W Tarczon Matthew G. Thometz Xinlu Tu Michael P. Varga Andrew J. Vitek QingWang Shiqi Wang Yanxuan Wang Jim Witkiewicz Sigi Wu Thomas Wu Tana Wuren Ying Xiong Yuting Xiong DaweiXu Jingian Xu Lu Xue Bo Yang Dengyu Yang Yumo Yao Wenwen Ye Sun Young Yim Anyi Yu Shuya Yu Yuhan Zha Chun Zhai Wei Zhang Winston Huang Zhang Yameng Zhang Yuanting Zhang Yantong Zheng Xintong Zhou James Zhu Kefu Zhu

Benjamin Thomas Ruby Praniti Sinha Abraham Dio Suharli Dajun Xu Ji Yoon You Chengyuan Zeng Zheyu Zhang

#### M. S. in Statistics

Peiran Cao Yi Cao Cecilia Chang Ruizhe Chen Xizhe Chen Xin Cheng Tarun Chhabra Daniel Dong Oh Chung Xin Ding Rong Du Zhenling Hong Hsin-Chieh Hsieh RuiJiao Shuangxin Lan Hang Li Jian Li

#### **M.S. Statistics Analytics**

Wanxin Bai Jing Gu Boyi Guo

### M.S. in Applied Statistics

Wathid Assawasunthonnet Lin Bian Congcong Chen Christopher David Eager Renato Ferreira Leitao Azevedo

Yuchen Li Boyang Liu Yuetong Liu Zhihao Liu Andrew K. Mehrmann Ruizhong Miao **Ettienne Montagner** Chufei Ou Zhoutao Pei Shuang Peng Stephen Thaddeus Prince Manze Qin Jingyi Ren Noah Salas Lyndsay Elizabeth Shand Ji Yong Shin YuhongTan Taylor Michael Thiel

Jiacheng He Yiwen Li Ruoqian Liu Zhihao Liu Shaoyang Luo

Tao Jiang ZhongyiLi Xiaomei Liu Ignacio Martin Sarmiento Barbieri Faith Donga Shin Jong Cheol Shin Chenchao Shou Ruchi Singh Zachary B. Turner Lijia Wang Tianyu Wang Yang Xu Jiaqi Yao LI Yuchen Jian Zhang Yukun Zhang Zeyu Zhang Haoxian Zhong Yingying Zhong Zhen Zuo

Li Miao Fabian Rodriguez Alonza Terry Hui Wang Xuan Wang

Qianqi Song Xu Tian Liwei Wen Yiwen Xiang Yilun Zhou Ye Zhuang



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Our department relies on the generous support of alumni and friends to provide the best possible learning and research environment for our students and faculty members.

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- Recruit and retain the best faculty members
- Provide state-of-the-art facilities that house important research and teaching
- Provide learning and professional development opportunities for our students

#### LAS ANNUAL FUND FOR STATISTICS (11334901)

To provide unrestricted support for the Department of Statistics in the College of Liberal Arts and Sciences at the University of Illinois at Urbana-Champaign

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To provide scholarships in the Department of Statistics, College of Liberal Arts and Sciences at the University of Illinois Urbana-Champaign.

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#### ROBERT E. BOHRER MEMORIAL FUND (11771508)

This Fund has been established to honor the memory of Robert E. Bohrer, who spent a long and distinguished career at the University of Illinois as a Professor in the Mathematics and Statistics Departments. Gifts to this Fund shall be used to support student workshops within the Department of Statistics

#### ILLINOIS STATISTICS CLUB FUND (11339011)

To support the Illini Statistics Club, student organization, in the Department of Statistics in the College of Liberal Arts and Sciences at the University of Illinois at Urbana-Champaign.

