NISS

Affiliates Update

JUNE | 2022

Welcome!

This monthly Affiliates Update highlights upcoming NISS sponsored events and activities.

PLEASE CIRCULATE THIS AFFILIATES UPDATE TO YOUR COLLEAGUES!

NISS sponsored events encourage cross-sector and cross-disciplinary networking. Let us know if you are planning an event and would like NISS to co-sponsor it. NISS affiliates can use their award funds to support these events or receive discounted registration. For more information about the NISS Affiliate program, see: https://www.niss.org/affiliate-program-information.

James Rosenberger Director NISS

UPCOMING EVENT: VIRTUAL CAREER FAIR

Pharmaceutical Companies

Wednesday, June 15, 2022 - 12 noon - 1:30 pm ET

Interested in pursuing a career as a statistician in the pharmaceutical industry? Then you won't want to miss this career fair sponsored by NISS that will offer essential information about job opportunities for statisticians/data scientists in this specific type of research environment.

Senior statisticians and data scientists will be on hand at both career fairs to provide attendees with an inside look at the varying aspects of the work that statisticians do in these research contexts and the career opportunities available for you to consider!

Each presenter will have 20 minutes to address the following general topics:

- 1. What are the preferred qualifications for a position in your institution?
- 2. What are the potential distinguishing characteristics of candidates for a position in your institution?
- 3. What advice would you give to job candidates?
- 4. What advice would you give about how Ph.D. students or postdocs should prepare for the future?

This event is the last NISS Career Fair for the Spring of 2022 so don't forget to register soon! Not to worry, several more career fairs are in the planning phases for the Fall of 2022! Keep your eye on the list of upcoming events on the NISS website or subscribe to the NISS Newsletter for all of the detals.

Register for the Pharmaceutical Companies Career Fair!



Moderator: Hannah Waddel (Emory) Speakers: Tom Bradstreet, Bristol-Myers Squibb; Nareen Katta, AbbVie, and Qiqi Deng, Moderna



1

UPCOMING EVENT: NISS WRITING WORKSHOP FOR EARLY RESEARCHERS!

The National Institute of Statistical Sciences (NISS) has been hosting the Writing Workshop for Early Researchers since 2007!

Each year, in conjunction with JSM, NISS gathers a host of senior authors, editors, grant writers/reviewers—individuals who take valuable time out of their day to share their advice and experiences with a group of junior faculty and early researchers. Evidence of the value of this workshop experience can be judged by:

1) the number of experienced, senior statisticians, authors and editors that have volunteered for years on end to share their wisdom and advice and 2) the number of session contributors that were once actual participants in the workshop! It is never too late to think about who might benefit next from this workshop at JSM 2022!

Workshop Schedule Highlights

Friday, July 29th, 2022 - Zoom

Tutorial 1: Writing Well as an Act of Kindness for Our Students and Colleagues

Tutorial 2: Choosing Where to Publish Panel 1: Statistics and Data Science Journals

Tutorial 3: Reviewing and Revising



UPCOMING NISS SPONSORED EVENT

International Total Survey Error Workshop (ITSEW) 2022

31 August - 2 September, 2022

Total Error in Official Statistics: Current Practices and New Methods

The conference will be hosted by The Cathie Marsh Institute for Social Research and The Social Statistics Department, School of Social Sciences, University of Manchester, United Kingdom.

In addition to traditional TSE topics, we are encouraging contributions on:

- Evaluations of multiple error sources in official statistics
- Error frameworks and their use for administrative data products
- Total error frameworks for Big Data
- "Total statistical uncertainty" frameworks for estimates derived

Friday, August 5th, 2022 - Zoom

Tutorial 4: How to Write a Collaborative Paper Panel 2: Grant Writing

Tutorial 5: Ethical Issues and Reproducibility

Happy Hour (BYOB) and hang out in the Classroom to swap email and contact information.

Sunday, August 7th, 2022 (at JSM)

Tutorial 6: How to Get Started and Avoid Writer's Block Panel 3: Speaking from Experiences and Career Development Networking Event Including Previous Virtual Writing Workshop Attendees from 2020 & 2021!

List of Session Speakers / Mentors confirmed for 2022!

Cheryl Eavey, Susan Ellenberg, Xuming He, Peter Imrey, Nicholas Jewell, Galin Jones, Karen Kafadar, Nicole Lazar, Shuangge Steven Ma, Edsel Pena, Donald Richards, James Rosenberger, William Rosenberger, Lingzhou Xue, and more to be confirmed!

Registration Open! Get Involved in this Career Launching Event!



from nonprobability samples

- Errors in data integration processes and integrated data products
- Use of quality profiles and declarations in official statistics
- Minimizing total error using ART (adaptive/responsive/tailored) designs and data collection strategies
- Statistical disclosure limitation error

The Call for Papers on the ITSEW2022 website is now open with deadlines and registration information.

Included with the registration are: A tour of Manchester, Wine reception and Conference dinner!

Get the Latest Updates for this Conference!



2

Become a Sponsor of NISS Hosted Events!

NISS Invites corporations, institutions and individuals to sponsor events that are hosted by NISS. Sponsorship helps to defray the cost of organizing events and is a great way to give your organization visibility that targets statisticians and other related professions who attend NISS events! *Learn More!*

RECENT EVENTS: 2ND ANNUAL GRADUATE STUDENT RESEARCH CONFERENCE A WONDERFUL SUCCESS!

NISS

The NISS Graduate Student Network hosted their 2nd Annual Graduate Student Research Conference for two days during the weekend of May 14-15 of May of 2022 from 12-5pm ET. This conference was sponsored by Procter and Gamble (P&G), a recently joined NISS Industry Affiliate!

Opening Remarks

The NISS Director, James Rosenberger, gave opening remarks highlighting NISS and expressed the wonderful job that the Graduate Student Network has done encouraged the audience to get involved.

William Breneman, the Global Statistics Discipline Leader and NISS Affiliate Liaison with the Procter & Gamble Company, emphasized how important it is to have soft skills and hard skills as students embark on their careers in the data science field in industry or other types of institutions.

Oral Research Presentations

The oral research presentations were separated into four sessions throughout the conference with 3-4 graduate students presenting their research for 15 minutes each, with a floor discussion at the end. These sessions were split up into four categories: High-dimensional statistical analysis and applications, Novel perspectives in Bayesian methodology, Contributions in computational and methodological statistics, Recent advances in bioinformatics and biomedical data analysis, and Modern statistical methods for dependent data. The full list and abstracts are available on <u>the NISS website</u>.

Poster Session + Happy Hour

Eleven graduate students submitted posters to be discussed during the conference's Happy Hour which took place after the oral research presentations on Saturday May 14th. The full list of these posters can be viewed on the NISS website.

Invited Panel Discussions

The first panel, "Statistics and Data Science Alumni Panel" took place on the first day of the conference, May 14th. During this panel, we brought together alumni of NISS Affiliate academic departments and institutions pursuing careers in statistics and data science. They each shared their experiences in the job market (application process/interviews/job talks) and spoke about their current jobs (such as statistical tools they use and their job environment) and answered questions from the audience.



Statistics and Data Science Alumni Panelists: Andreea Luisa Erciulescu (Westat), Dhanushi Wijeyakulasuriya (Microsoft), Nathan Cruze (NASA), and Spiro Stilianoudakis (P&G).

The second panel was "Tips for Statistical Communication and Data Storytelling." During this session, our expert panelists shared tips and and answered questions from the audience. Panelists included: Lucy D'Agostino McGowan (Wake Forest University); Natalie Dean (Emory University); and Julia Silge (RStudio PBC).

Best Presentations Awards

Sumanta Basu, (Cornell) declared four winners of this year's Excellent Presentations Award! Each of the selected students are awarded \$125 and a certificate. Selected students for this award go to:

Rebecca Kurtz-Garcia, UC Riverside Adam Tonks, UIUC Manqi Cai, University of Pittsburgh Brandon Lumsden, Clemson University

GRADUATE STUDENT RESEARCH CONFERENCE May 14-15, 2022

About the Graduate Student Network

The Graduate Student Network is composed of 70+ graduate students in statistics, mathematics, biostatistics and other data science fields from NISS Affiliated universities and institutions! GSN has hosted a variety of events such as Virtual Socials, Webinars and of course the Graduate Student Research Conference. Keep informed and get involved! GSN also posts upcoming opportunities for graduate students in data science fields!

Read the Complete News Coverage with links to Abstracts and Conference Screenshots

NISS ACADEMIC CAREER FAIR PROVIDES ADVICE TO CANDIDATES

NISS hosted a career fair provided guidance on what priorities should be set, such as getting publications sent out, perfecting your teaching, accepting service and committee assignments, and much more!

Each presenter provided a 20 minute presentation to address questions and gave advice to new hires, provided guidance on how to seek colleagues who can provide good career advice, and outlined some of the characteristics of candidates for a tenure-track/tenured faculty position in their institutions.

Speakers during this academic career fair included **Bo Li** from the Department of Statistics at University of Illinois Urbana-Champaign, **Robert Krafty** from the Rollins School of Public Health Department Biostatistics and Bioinformatics at Emory University, and **Dylan Small** from The Wharton School Department of Statistics at University of Pennsylvania. The moderator for this session was Xiufan Yu from the Department of Applied and Computational Mathematics and Statistics (ACMS) at University of Notre Dame.

Moderator Xiufan Yu, (Notre Dame) poses questions to speakers Bo Li (Illinois), Robert Krafty (Emory), and Dylan Small (U Penn).



Read the Complete News Coverage of this Event along with a Recording of this Session!

WINNERS ANNOUNCED! NISS 2022 DATA VISUALIZATION CONTEST – *SAID IN GRAPHICS!*

NISS

The National Institute of Statistical Science sponsored a second SAID (Statistically Accurate Interactive Displays) in Graphics student data visualization contest this Spring, 2022.

The competition was open to graduate and undergraduate students at a US or Canadian institution of higher education. Entries were accepted from teams of up to five students and from individuals where teams could submit up to two graphics for the same or different data sets.

The data for the contest was selected in conjunction with NCES from the <u>Digest of Education Statistics from the National Center for</u> <u>Education Statistics</u>. There were five choices of data to select for the contest that presented different types of data (including geographic and longitudinal) that also included different types of variables.

The interactive graphics were designed to communicate with the public by grabbing the readers' attention, enticing them to interact with the data, and leading them to more deeply investigate the substantive questions addressed by the data. The target audience of the graphics included parents, educators, policy makers, and researchers.

The 2022 SAID in Graphics Contest received 39 entries from Graduate and Undergraduate students in the US and Canada. The entries examined the data either over-time or geographically, or both! The judges for the contest included **Nola du Toit** from the NORC-University of Chicago, **Heike Hoffman** at Iowa State University, and **Haley Jeppson** a current NISS Research Associate. The contest was organized and managed by **Brian Habing**, NISS Associate Director for Education Activities and Research. This year, just as last year, the submissions gave the judges much to discuss! The judges extend a sincere thank you to all the individuals and teams that submitted entries included everything from the very interesting and precise to the exceptionally innovative!

After much deliberation the judges made the following selections:

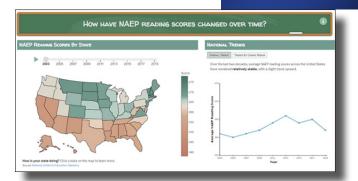
1st Place Overall

Logan Kocka at Miami University in Ohio who was completing a BS in Biomedical Engineering over the spring, and has moved on to graduate school at Notre Dame.



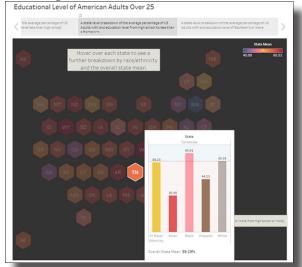
2nd Place (for Best Entry Page/Most Inviting Opening Screen) Emily Flanagan, Melody Huang, and Tiffany Tang all from the Ph.D. Program in Statistics at University of California, Berkeley

Visit the NISS Website for Complete News Coverage and Screenshots from all of the Winning Entries!



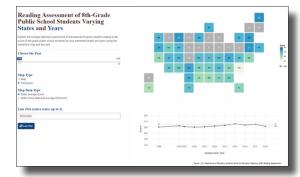
2nd Place (for Best Presentation of Uncertainty)

Thu Trang Nguyen, Jana Turner, and Jiaxuan Yang pursuing B.S. degrees in Business, Computer Science, Mathematics, and Economics at Rhodes College.



Judges Choice Honorable Mention

Yi Chen Ph.D. in the Department of Biostatistics and Medical Informatics at University of Wisconsin-Madison.



Want More Information?

If you're planning to be at JSM in Washington, D.C. this summer, there will be more on the contest entries and the entrants' insights. Join us at <u>Session 287 "Student Insights into Graphical</u> <u>Innovation for Educational and Government Reports"</u> on Tuesday the 9th at 10:30 AM. For more on visualizations for government reports, sign up in advance for <u>Round Table 211 "Combining Visualization</u> <u>Best Practices with Agency Standards for Statistical Graphics in</u> <u>Government Reports"</u> on the 9th at 7:00 AM.

4

UPCOMING EVENTS

JUNE

Virtual Career Fair - Pharmaceutical Companies

Event Date: Wednesday, June 15, 2022 - 12 noon - 1:30 pm ET Event Type: Webinar

The pharmaceutical industry provides interesting and challenging career and research opportunities for statisticians and data scientists. Is work in the pharmaceutical sector something that you would like to know more about? Then this session is for you! NISS hosts Career Fair sessions that focus ... (read more)

ISBIS CONFERENCE 2022 on "Statistics and Data Science in Business and Industry"

Event Date: June 20-21, 2022 Event Type: Conference

The ISBIS CONFERENCE 2022 on "Statistics and Data Science in Business and Industry" will take place at University of Napoli Federico II in Naples June 20-21, 2022. The Program and Organizing Committees hope to offer the opportunity to meet in person to share perspectives on the newest developments... (read more)

JULY

2022 NISS Writing Workshop for Junior Researchers

Event Date: July 29, August 5 & 7, 2022 Event Type: Workshop

Once again this very popular short course will be hosted by NISS. If you are a recent graduate of a doctoral program and want to improve your communication skills - then this event is for you! "Thanks for organizing the writing workshop! We are very glad that we attended the workshop. We learned... (read more)

AUGUST

International Total Survey Error Workshop (ITSEW) 2022

Event Date: 31 August - 2 September, 2022 Event Location: University of Manchester, UK

Theme: "Total Error in Official Statistics: Current Practices and New Methods." The International Total Survey Error Workshop 2022 will take place from the 31st of August through the 2nd September 2022. It will be hosted by The Cathie Marsh Institute for Social Research and The Social Statistics Department,... (read more)

Check the <u>NISS Events webpage</u> for up to date event info!

NISS **VouTube**

<u>Check out NISS on YouTube</u> for Recordings of Previous Events!

Subscribe to this Newsletter!

NISS POSTDOCTORAL/EARLY CAREER STATISTICIANS & DATA SCIENTISTS

New Research Positions at NISS for Summer 2022!

RESEARCH THAT MAKES A DIFFERENCE

Early career researchers at NISS have the opportunity to work with researcher leaders to develop innovative data science technology and statistical modeling methodology to address high impact problems. Projects are variously located at NISS-DC, at a NISS Affiliate/hub or at federal statistical agencies. and to see the impact as these solutions are implemented. Research projects at NISS make a difference by developing innovative data science technology and statistical modeling methodology for high priority projects at federal statistical agencies. Primary focus of each project may call for specific expertise such as:

 statistical and AI modeling of massive, high dimensional data,
Bayesian modeling for prediction of highly defined small subset properties, including small area estimation/prediction,

Iatent factor analysis to define new metrics of difficulty

◊ visualization of statistical data,

♦ statistical/mathematical/AI space-time modeling that integrates heterogeneous data types (satellite image, GIS, sample survey,

theoretical/empirical model),

 GANS or other Al simulation for synthetic networks and complex data as suitable surrogates for privacy-restricted large scale data
other data science and statistical computation tools.

NISS Research Associates are highly successful and publish and present their research regularly. As testimony to their research on high-priority challenges, especially for methodology defining key national statistics and indicators, NISS Research Associates continue to receive awards both for individual contributions and for work with multidisciplinary teams.

NISS appointments are for one year with expectation of renewal. Positions are open as early as February 2022. Applicants must be able to work in multidisciplinary context and to bring statistical theory and data science technology to a research team with the goal of formulating a comprehensive technical approach problem solving.

US citizenship may be required for some NISS positions.

<u>Applications are accepted on the NISS website</u>. Please include citizenship/visa status and date of availability with the application.

5

Affiliates! Post Your Job Announcements On the NISS Website!

A link to the Job Announcements page can be found at the bottom of of every page of the NISS website! Share your announcement with other organizations associated with NISS or other visitors to our website. Interested in the positions that have been posted?

Current job opportunities at NISS and with NISS Affiliates. This might be the career opportunity that you have been looking for!

Visit the <u>NISS Job Annoucements Page</u>

The National Institute of Statistical Sciences (NISS) is an organization whose mission fosters cross-disciplinary research and advocates for statistical engagement in data science.

NISS

www.NISS.org

For more information about the National Institute of Statistical Sciences,

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