NISS

Affiliates Update

JUNE | 2020

WELCOME!

This latest edition of the Affiliates Update highlights upcoming NISS sponsored events. At NISS sponsored events, NISS affiliates are eligible to use their Affiliate Award Funds to pay for registration and travel expenses. Again, this month we focus on virtual events due to COVID-19 and the widespread cancellation of in-person events. Please check the NISS website for the latest changes: https://www.niss.org/events

PLEASE BE SURE TO 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. For more information about the NISS Affiliate program, see: https://www.niss.org/affiliate-program-information. To become a member, complete the application available at https://www.niss.org/affiliates/become-affiliate

James Rosenberger, Director NISS

SPECIAL VIRTUAL TUTORIAL - REGISTER TODAY!

NISS/ASA Tutorial on Susceptible-Infected-Recovered (SIR) Modeling

Event Date: Tuesday, June 30, 1 - 3 pm (ET)
Event Location: Online Tutorial

The Susceptible-Infected-Recovered (SIR) model is being used by scientists around the world to study the infectious disease dynamics of the COVID-19 epidemic and guide public health policy decisions for mitigating the impact of the disease. The National Institute of Statistical Sciences (NISS) and the American Statistical Association Section on Statistics in Epidemiology (ASA-SIE) have teamed up to co-sponsor a special two hour tutorial on SIR methods. In this tutorial, you will learn about the background and theory of the SIR modelling approach, how it is applied to understand the spread of COVID and other infectious diseases, and how to use R software to fit basic and more complicated SIR models. Participants are expected to have some basic familiarity with R. The instructor for this event is **Ottar Bjornstad**, (Penn State University). (register here)

Free for NISS Affiliates and ASA-SIE Section members!

NISS/ASA Tutorial on Susceptible-Infected-Recovered (SIR) Modeling

June 30, 2020
1 - 3 pm (ET)

ASA — AMERICAN STATISTICAL ASSOCIATION — Promoting the Practice and Profession of Statistics

NISS | National Institute of Statistical Sciences

Mark your Calendars!
Register Today!

JUNE

Webinar Series: Mathematical Foundations of Data Science

Event Date: June 16, 2020 3 pm (ET)
Event Location: Online Webinar

Representation, Modeling, and Gradient Based Optimization in Reinforcement Learning Speaker Sham Kakade, University of Washington, Seattle Abstract Reinforcement learning is now the dominant paradigm for how an agent learns to interact with the world. The approach has lead to successes ranging... (read more)

Webinar Series: Data Science in Action in Response to the Outbreak of COVID19

Event Date: June 19, 2020, 11 am EDT
Event Location: Online Webinar

A statistical transmission model for COVID-19 outbreak, with adjustment of external factors Speaker: Dr. Yifan Zhu, Staff Scientist, Fred Hutchinson Cancer Research Center Abstract: The COVID-19 pandemic showed some resemblances to previous outbreaks caused by coronaviruses such as SARS and MERS.... (read more)

Webinar Series: Data Science in Action in Response to the Outbreak of COVID19

Event Date: June 26, 2020, 11 am EDT
Event Location: Online Webinar

The Opportunities and Challenges of Healthcare Systems in the COVID-19 Era Speaker Dr. Kimia Ghobadi, John C. Malone Assistant Professor, Johns Hopkins University Abstract The COVID-19 pandemic has been a major global challenge since its emergence. With the fast growth in its range of spread, the... (read more)

Check the NISS Events webpage for up to date event information!

NISS/ASA Tutorial on Susceptible-Infected-Recovered (SIR) Modeling

Event Date: Tuesday, June 30, 1 - 3 pm (ET)
Event Location: Online Tutorial

The Susceptible-Infected-Recovered (SIR) model is being used by scientists around the world to study the infectious disease dynamics of the COVID-19 epidemic and guide public health policy decisions for mitigating the impact of the disease. The National Institute of Statistical Sciences (NISS) and... (read more)

JULY

Webinar Series: Data Science in Action in Response to the Outbreak of COVID19

Event Date: Friday, July 10, 2020
Event Location: Online Webinar

Semiparametric Bayesian Inference for the Transmission Dynamics of COVID-19 with a State-Space Model Speaker Dr. Yuan Ji, Professor, University of Chicago Abstract The outbreak of Coronavirus Disease 2019 (COVID-19) is an ongoing pandemic affecting over 200 countries and regions. Inference about... (read more)

AUGUST

2020 NISS Writing Workshop for Junior Researchers (at JSM)

Event Date: August 7 & 14, 2020
Event Location: This will be an Online Multiple DayEvent!

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! JSM is going virtual is this workshop is too! (read more)

WRITING WORKSHOP - JUMP START YOUR UBLISHING SKILLS!

2020 NISS Writing Workshop for Junior Researchers (at JSM)

Event Date: August 7 & 14, 2020
Event Location: This will be an Online - Multiple Day Event!

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! The goal of the workshop is to provide instruction for writing journal articles and grant proposals. Participants will be required to provide a recent sample of their writing, which will be reviewed by a senior mentor. The sample could be a current draft of an article to be submitted for publication or an early version of a grant proposal. Senior mentors will be former journal editors and program officers, who will critique the submitted material and provide individual feedback. Participants will be expected to initiate a revision in response with additional feedback from their mentors.

Deadline for the Writing Workshop application submission is June 30, with notification of acceptances on a rolling basis no later than July 15. Comment from previous participant:

"THANKS FOR YOUR THOROUGH GUIDANCE IN THE NISS WRITING WORKSHOP! I FOUND THAT THE ONE-TO-ONE MENTORING IS VERY HELPFUL FOR US TO GET INSIGHTS INTO OUR SHORTCOMINGS IN ACADEMIC WRITING. I REALLY APPRECIATE YOUR WORK IN ORGANIZING SUCH A WONDERFUL EVENT."

See the NISS Website for additional information and how to apply. Send in your materials early - this is a valued and very popular workshop! (read more)

NISS Writing Workshop for Junior Researchers (at JSM)

SUCCESSFUL CAREER FAIR SERIES FINISHES WITH INSIGHTS INTO BIOPHARM INDUSTRIES

On June 3rd NISS hosted its final and most well attended Career Fair, the eighth in a series of career fairs that have generated a wealth of knowledge and insight into what it is like and what is required to acquire and thrive as a statistician in industry, government and/or academia. Today's session was a wonderful example of this.

Three senior statisticians shared with an audience of over 70 NISS affiliate members information about their companies, the opportunities that exist for beginning statisticians and data scientists and their personal advice for those interested in acquiring a position in the biopharmaceutical industry. The speakers included Rakhi Kilaru, the Director of Statistical Science at PPD, Jonathan J. Lisic, a senior Data Scientist at Cigna and Richard Zink, Senior Director of Data Management and Statistics at TARGET PharmaSolutions.

Rakhi Kilaru was the first to present. After sharing the mission and the "Five Defining Principles" that defines PPD, she described her own journey for how she got to where she is now and the background and experience that she had developed along the way. This lead to a description of the various career opportunities for biostatisticians at PPD and the skills that are needed. She also branched out to describe other tracks in data analytics and data sciences that are constantly evolving at PPD. Is PPD hiring? The answer is yes! You will want to check out the contact information and other resources she shared in her slides.

For Jonathan Lisic, working at home is not something new. His position at Cigna has allowed him to work from home for several years now! His background is also proof that it is possible to change positions from government, where he worked with data in the Bureau of Labor Statistics and then later in the National Agricultural Statistics Service before his move to the healthcare industry! He shared information about what data scientists are involved in at Cigna as well as the skills that are important to have. In particular he mentioned that various tools and methods that are used including machine learning, experimental design and GIS. He finished his remarks with reasonable and practical advice for those on the job market.

Moderator: Kevin Lee (Western Michigan University) Speakers: (left to right) Rakhi Kiralu (PPD), Jonathan Lisic (Cigna) and Richard Zink (TARGET PharmaSolutions).

As the final speaker Richard Zink began his general remarks by mentioning that TARGET PharmaSolutions is a much smaller company and so the work is different in that you usually have to "wear many different hats instead of specializing in one area". Like the previous two speakers he reviewed his personal journey which included large companies and small. Now at TARGET PharmaSolutions he described his company as a "real-world data" company, bridging the gap between real-world evidence and randomized controlled trials which allows them to sit at the intersection of industry, the regulatory agencies and academia. It was clear that he really enjoys the kinds of work his company gets involved in as it relates to its mission. Richard concluded his remarks by describing the variety of skills that are critical to the work he does and encouraged the listeners to make a habit of always updating your CV and find ways to get involved, particularly with the American Statistical Association!

By the time the Question and Answer session opened, moderator Kevin Lee (Assistant Professor, Western Michigan University) had his hands full trying to present as many questions as he could in the time allotted. There were several very interesting questions such as: "What is the day in the life of a data scientist like?", "How does someone get started in statistical consulting?", "Is a Ph.D. required to get a position as a biostatistician?", and "What if I do not have any experience or background in the healthcare industry?"

----- NISS Affiliates! -----

On the NISS website you can find a recording of this session along with copies of the slides that the speakers used. The slides not only provide you with the key points that were offered but also include links to additional resources that should not be ignored!

Link to Session Resources for NISS Affiliates!

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