NISS

Affiliates Update

JANUARY | 2021

Welcome!

This monthly Affiliates Update highlights upcoming NISS sponsored events.

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: <u>https://www.niss.org/affiliate-program-information</u>.

James Rosenberger, Director NISS

NEWS: INGRAM OLKIN FORUM FOCUSES ON DATA AND MODELS FOR OPENING AND CLOSING SCHOOLS AND LEARNING LOSS

To honor the work and actions of the late Ingram Olkin, NISS brings together experts and researchers from a variety of fields and backgrounds into forums. The focus of these forums is to bring forward a current societal issue that might benefit from attention from the statistical community and others.

The pandemic has impelled school administrators to make urgent and critical choices. Should schools be open? Closed? Under what circumstances? What criteria are important, indicative and/or informative? Furthermore, how has student learning been impacted by all of these disruptions?

The NISS Ingram Olkin Forum session organizer **Betsy Becker** (Florida State University) brought together a number of individuals who have distinguished themselves through their work in this area. The speakers at this session included journalist Stephen Sawchuk from Education Week, Senior Fellow **Brian Gill** and Senior Statistician **Ravi Goyal** from Mathematica, Post-doctoral Research Scientist Dina Mistry and Senior Research Scientist **Cliff Kerr** from the Institute for Disease Modeling (IDM), Senior Research Scientist **Megan Kuhfeld** from the Northwest Evaluation Association, and Senior Policy Researcher **Julia Kaufman** and Senior Statistician **Claude Setodji** from RAND. As you might imagine, these speakers addressed these questions from a variety of perspectives.

The forum kept the presentations short allowing a generous time for

audience questions and a discussion of the challenging issues that have arisen during the pandemic. Questions included: "If the National Center for Education Statistics (NCES) had the resources to do new surveys, what would you see as the most important questions to be asked to inform not only the rest of the school year but the return to full school operations?" and "What is the most dubious assumption that you have made in the modeling that you have done?"

The back and forth of this session was wonderful, which makes the discussion around these topics definitely worth reviewing!



Review the recording of this session on the NISS Website!

UPCOMING EVENT SERIES: ESSENTIAL DATA SCIENCE FOR BUSINESS TUTORIALS SCHEDULED INTO THE NEW YEAR

NISS concluded its fall round of five tutorials in a brand **new series** that focuses on some of the most interesting topics in data science that are in use in business today!

Here are the tutorial sessions that are coming next! Register for these sessions today!

February 10, 2021 - Julia Silge: "Unstructured Data Analysis - Text Mining with Tidy Data Principles"

Unstructured data is increasingly important in many domains, and tidy data principles and tidy tools can make mining data like text easier and more effective. In this workshop, learn how to manipulate, summarize, and visualize the characteristics of unstructured and text data using these methods and R packages from the tidy tool ecosystem. (read more)

February 24, 2021 - Rochelle Tractenberg: "Ethical Practice for Statistics and Data Science in the Social Sciences"

The American Statistical Association (ASA) is in the process of revising its current (2018) Ethical Guidelines for Statistical Practice, which are relevant in every step of the pipeline. To demonstrate this relevance and utility, this workshop introduces two important tools practitioners can use to support ethical decision-making along the pipeline: we will examine ethical reasoning, a 6-step process for decision-making, and stakeholder analysis, which can help identify where ethical challenges might arise.

March 10, 2021 - Jie Chen (Wells Fargo), Tim Hesterberg (Google) and Juan Li (Google): "Domain Knowledge and Case Studies"

This tutorial features a review of three different case studies found in business today. Below are the titles of three presentations: Artificial Intelligence and Machine Learning Applications in Banking, Surveys and Big Data for Estimating Brand Lift and Forecast Generation and Evaluation for Datacenter Capacity Planning (read more).



March 24, 2021 /Instructor: Sam Woolford (Bentley University) "Analytical Consulting, Communication and Soft Skills"

April 7, 2021 - Instructor TBA: "Prescriptive Analytics and Optimization"

Registrations options: \$35 for single Data Science Essentials tutorial sessions, \$250 for all 10 Essential Data Science for Business tutorial sessions. Can't attend the live session? Post Session Access to tutorial materials and recording can be obtained for \$35 after the event is over (click on Post-Session Access link). NISS Affiliates please send an email to officeadmin@niss.org.

Find Full Session / Registration Details for all tutorials on the NISS website!

UPCOMING EVENT: FIRST CANSII-NISS HEALTH DATA SCIENCE WORKSHOP

May 6-8, 2021

Nowadays, statisticians and health data scientists actively work together on the frontier of biological, medical, and public health research. The transdisciplinary collaboration not only develops the modern foundations of Health Data Science but also accelerates the pace of scientific discovery and innovation.

The First CANSSI-NISS Health Data Science Workshop will be held virtually on May 7-8, 2021, with pre-workshop short courses on May 6th. The workshop brings statisticians and health data scientists from the U.S. and Canada together to explore current approaches and new challenges for learning Big Data in Health Data Science.

The two-day workshop consists of two keynote presentations, four invited sessions, a speed session for students, a late-breaking session, and two split-out virtual lunch & networking sessions. The themed invited sessions will explore current approaches and new challenges in

(i) Statistical Issues with COVID-19,

- (ii) Statistical Problems in Imaging and Genetics,
- (iii) Causal Inference for Big Health Data, and
- (iv) Methods for Electronic Health Data.

Keynote speakers are: Xiao-Li Meng (Harvard) and Mary Thomspon (U Waterloo), and late-breaking session speaker, Bin Yu (Berkeley)!



Register for this Event Today!

UPCOMING EVENTS

NISS

JANUARY

COPSS-NISS COVID-19 Data Science Webinar Series

Event Date: Thursday, January 21, 2021 12-1pm ET (9-10am PT) Event Type: Online Webinar

Transmission Dynamics of SARS-CoV-2: Inference and Projection

- Dynamic models of infectious disease systems are often used to study the epidemiological characteristics of disease outbreaks, the ecological mechanisms and environmental conditions affecting transmission, and the suitability of various mitigation and intervention strategies ... (read more)

FEBRUARY

COPSS-NISS COVID-19 Data Science Webinar Series

Event Date: Thursday, February 4th, 2021 12-1pm ET (9-10am PT) Event Type: Online Webinar

Host and Viral Genetics of SARS-CoV-2 to Enable Epidemiologic Surveillance, Clinical Insight and Pathobiology Current developments in sequencing technology have allowed for an unprecedented look at the virus causing the current pandemic, SARS-CoV-2. Leveraging work by the ARTIC network, we have setup a sequencing pipeline at Johns Hopkins to ... (read more)

Essential Data Science for Business: Unstructured Data Analysis - Text Mining with Tidy Data Principles

Event Date: February 10, 2021 1-4 pm ET Event Type: Online Tutorial

Have you ever encountered text data and suspected there was useful insight latent within it but felt frustrated about how to find that insight? Have you used dplyr and ggplot2 before, and are ready to learn how unstructured data such as text can be analyzed within the tidyverse ecosystem? ... (read more)

Essential Data Science for Business: Ethical Practice of Statistics and Data Science in the Social Sciences

Event Date: February 24, 2021 1-4 pm ET Event Type: Online Tutorial

Data science is a discipline at the intersection of computing and statistics – two disciplines with long-standing guidance for ethical practice. The "data science pipeline" comprises six tasks: Planning/ Designing; Data collection/munging/wrangling; Analysis (perform or program to perform); Interpretation; Documenting your work; Reporting your results/communication; plus a seventh activity, Engaging in team science/team work. ... (read more)

MARCH

Essential Data Science for Business: Domain Knowledge and Application Areas

Event Date: March 10, 2021 1-4 pm ET Event Type: Online Tutorial

This tutorial features a review of three different case studies found in business today. "Artificial Intelligence and Machine Learning Applications in Banking" (Jie Chen – Wells Fargo) "Surveys and Big Data for Estimating Brand Lift" (Tim Hesterberg – Google) "Forecast Generation and Evaluation for Datacenter Capacity Planning" (Juan Li – Google) ... (read more)

Essential Data Science for Business: Analytical Consulting, Communication and Soft Skills

Event Date: March 24, 2021 1-4 pm ET Event Type: Online Tutorial

This is a tutorial that discusses "Analytical Consulting, Communication and Soft Skills", Sam Woolford (Bentley University) instructor.

Webinar Series: Mathematical Foundations of Data Science

Event Date: March 26th, 2021 11am ET Event Type: Online Webinar

Harnessing structure and algorithmic properties for scalable learning methods over networks Speaker Na Li, Harvard University ... (read more)

APRIL

13th Annual Conference on Statistical Issues in Clinical Trials: Cluster Randomized Clinical Trials (CRTs): Challenges and Opportunities

Event Date: Monday, April 12, 2021 - 8:30 am to 4:30 pm ET Event Location: Philadelphia, PA

Conference Theme - Cluster Randomized Clinical Trials: Challenges and Opportunities Save the Date! Registration is open! Follow the links to review the complete program and list of speakers! (read more)

MAY

First CANSSI-NISS Health Data Science Workshop

Event Date: May 6-8, 2021 Event Type: Online Conference

Nowadays, statisticians and health data scientists actively work together on the frontier of biological, medical, and public health research. The transdisciplinary collaboration not only develops the modern foundations of Health Data Science but also accelerates the pace of scientific discovery and... (read more)

AISC 2021

Event Date: October 8 - 10, 2021 Event Location: Greensboro, North Carolina, 27412

International Conference on Advances in Interdisciplinary Statistics and Combinatorics The main objective of the conference is to promote interdisciplinary research involving statistical techniques. These techniques are becoming increasingly important in all fields of scientific discovery. A unique... (read more)

Find the latest full details for all upcoming events on the NISS website!

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