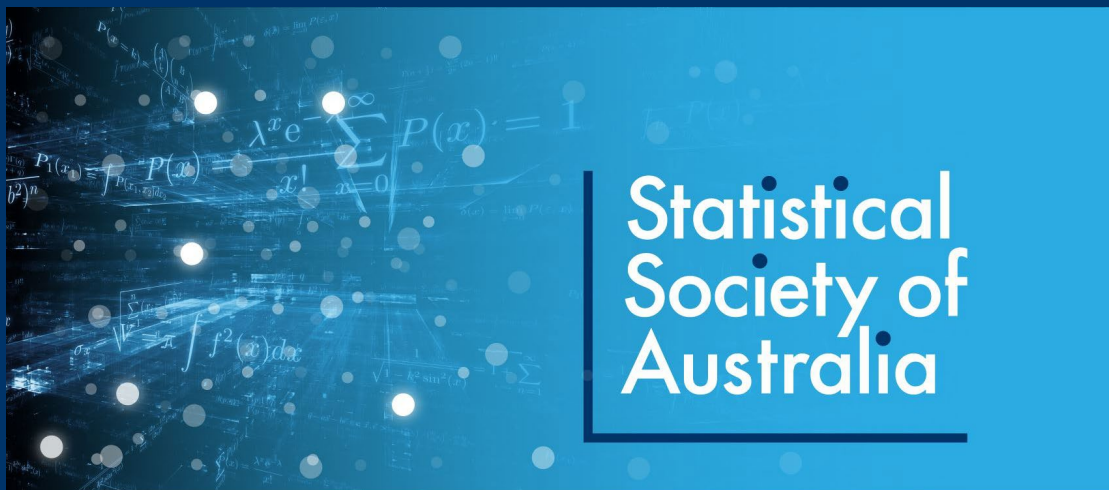


From: [Statistical Society of Australia](#)
To: [Contact us](#)
Subject: Stats Matters & Events
Date: Thursday, 6 July 2023 2:58:04 PM



STATS MATTERS & EVENTS

6 July 2023

In Australia, this first full week in July is dedicated to the celebration of [NAIDOC Week](#).

NAIDOC Week is an annual observance held in Australia to celebrate the history, culture and achievements of Aboriginal and Torres Strait Islander peoples. NAIDOC stands for the *National Aboriginal and Islander Day Observance Committee*, a group of ten committee members responsible for organising the events for this occasion. This year's theme is "For Our Elders".

We are being treated to a wide range of activities and events such as cultural performances, art exhibitions, sporting events, community gatherings and educational programs. It is a wonderful opportunity to learn about and appreciate the rich and diverse cultures, languages, traditions and contributions of First Nations people.

Every year, Wiley, the publisher of the Australian and New Zealand Journal of Statistics, recognises the significance of NAIDOC Week by assembling a curated research collection that commemorates the remarkable contributions made by First Nations individuals in various research disciplines. This collection showcases freely accessible research authored by Indigenous

individuals and covers topics related to Indigenous Australian subjects.

To explore this collection, which includes featured researchers, recent highlights and articles like "How Australian journals and societies are promoting Indigenous involvement in research," please visit the [Wiley Network](#).

[Marie-Louise Rankin](#)

Executive Officer

Read newsletter in your [browser](#)

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SSA NSW Branch June event: Quantifying the known unknowns

On the 27th of June, we had our monthly event. We featured a junior speaker, Ms Yiyi Ma from UNSW, and a senior speaker, Professor Lucy Marshall from Macquarie University. They discussed the interaction between statistics and machine learning, aiming to address a common issue in machine learning that make statisticians turn up their noses: the lack of interpretability.

Yiyi, a second-year PhD student in DARE ([ARC Training Centre in Data Analytics for Resources and Environments](#)), introduced us to her work on particle filters for non-Gaussian models, specifically state-space models. An intriguing aspect of her talk focused on the significance of discretization in such algorithms.

Lucy, the Executive Dean of the Faculty of Science and Engineering at Macquarie University and Deputy Director of DARE, presented her research on statistical models for hydrology. It was a matter of pride for us to host Lucy's first research talk at Macquarie University! Her expertise allowed her to explain how environmental research and data analysis can be merged, especially concerning complex data. She illustrated the various levels of analysis that can be conducted, and mentioned certain challenges, including multimodality, data constraints, and zero-inflated data. Moreover, Lucy emphasised that modern technologies have made hydrological and environmental datasets even more intricate, introducing uncertainty due to the quality of detection. Additionally,

datasets sometimes include coarse global data of low quality, alongside high-quality local data, further complicating the analysis.

Lucy also touched upon a topic of great interest to statisticians (which aligns with some of my personal research!): while the popularity of machine learning in certain areas is growing (for example among students working on their assessment and using large language models!), in other areas faith in machine learning techniques is waning due to their lack of interpretability. Statisticians are stepping in to address this issue by developing hybrid approaches that incorporate machine learning methods within statistical models. DARE serves as an excellent Australian example of successfully integrating these hybrid approaches.

This event marked our first gathering at Macquarie University since before the COVID-19 pandemic, and it was truly exciting! Despite being during the semester break, we had a remarkable turnout of participants attending in person, along with a significant number of participants joining us online. We look forward to future events and being back to Macquarie!

Dr Clara Grazian
President, SSA NSW Branch



Applying AI ethics in real-world scenarios: Establishing trustworthy AI

Brian Tarran, Head of Data Science Platform at the Royal Statistical Society (RSS) recently posted on LinkedIn:

“How can we translate [#AI](#) [#ethics](#) from theory into practice? A new article on [RSS Real World Data Science](#) tackles this and other questions.

Authors [Maxine S.](#) and [Mira Pijselman](#) review three key attributes of trustworthy AI – transparency, explainability, and fairness – and ways to embed these qualities, including:

- datasheets and model cards

- techniques and tools for model-agnostic interpretability
- technical and non-technical measures to address bias

"Data scientists can act as critical enablers of ethical AI when they have the right knowledge and toolkits at their disposal." "

[Read the article here](#)

Greek government's appeal against European Court ruling siding with Andreas Georgiou withdrawn

Only last week I wrote about the Greek government lodging an appeal against the European Court ruling siding with Andreas Georgiou. Things can change quickly: As reported in "Newsroom" this week, the recently elected Mitsotakis government has now initiated the necessary steps to retract the request.

[Find out more](#)

Request for topic suggestions: R-Ladies of Melbourne to showcase R demos at ASC & OZCOTS 2023

We are delighted to announce that R-Ladies of Melbourne will be participating in the upcoming [Australian Statistical Conference & OZCOTS 2023](#), setting up R demos during the event. The organisers are seeking your assistance in identifying specific areas of interest that attendees might like to see in these demos.

By tailoring their presentations to match our delegates' needs, R-Ladies can ensure that the sessions are both relevant and valuable. Please email our Event Coordinator, [Jodi Phillips](#), to share your preferences or suggestions for particular topics. Thank you!

The graphic features a blue speech bubble on the left containing the text 'THE RANDOM SAMPLE' in white and yellow. Below it is a QR code with a 'b' logo. To the right, the title 'Open-sourcing Data Science Education' is written in a large, bold, blue font. Below the title are two portrait photos: Professor Mine Çetinkaya-Rundel on the left and Cynthia Huang on the right, with the text 'Hosted by: Cynthia Huang' below her photo. At the bottom, a dark blue banner contains the website 'TheRandomSample.com.au' in white and yellow text.

Check out the latest episode of The Random Podcast on

Open-sourcing data science education with Professor Mine Çetinkaya-Rundel, Professor in the Department of Statistical Science at Duke University in the United States.

Mine's work is so much more than just educating students about statistics and data science. She's a big proponent of what she calls 'open education', the open source sharing of how stats and data science are taught, and innovating the pedagogy.

In this episode, we explore how Mine is doing this, and why this type of work is so important.

Your host is Cynthia Huang, a PhD Candidate at Monash University in the Department of Econometrics and Business Statistics.

[Click here to access the podcast](#)

Mentioned in previous newsletters:

SSA Branches have opened applications for funding to attend ASC/OZCOTS 2023

Branches of the Statistical Society are offering funding for student and early career members of the society to attend the [Australian Statistical Conference \(ASC\)](#) and [Australian Conference on Teaching Statistics \(OZCOTS\)](#) in

Wollongong, 10th - 15th December 2023. All branch funding will cover registration to the conference, with some branches covering additional travel if funds allow. For full details see each branches' announcement.

- Canberra (check your email for 'Canberra branch ASC & OZCOTS 2023 rego grant')
- NSW ([application form](#))
- Queensland ([application form](#))
- South Australia & Northern Territory ([application form](#))
- Victoria & Tasmania ([application form](#))
- Western Australia ([application form](#))

With best wishes,

ASC & OZCOTS 2023 Programming Committee

SSA Equity, Diversity and Inclusion Committee: We want you!

The SSA's Equity, Diversity and Inclusion (EDI) Committee is charged with ensuring that our Society is welcoming and accessible to all. Since its formation in 2021, we've done many things to ensure diversity of our Society, including developing guidelines to help ensure Branch and Section events are welcoming and inclusive, seeking feedback on EDI issues from our members, and providing feedback to the Australian Bureau of Statistics on the inclusion of questions on sex and gender in future censuses. You can find out more about the committee [here](#).

If you're enthusiastic about equity, driven by diversity, or interested in inclusion, then we'd like to invite you to join the EDI Committee. For more information, please get in touch with the EDI Committee chair, [Jess Kasza](#).

SSA Events

Statistical Consulting Network July Meet-Up

28 July 2023, 12:30 PM – 1:30 PM AEST, held online

Come along with your thinking cap, maybe a problem, and some lunch!

The Statistical Consulting Network invites you to their monthly meet-up, a virtual lunchtime meeting where statisticians help each other out with problems that they aren't sure how to deal with. This virtual meeting is held on Zoom at

lunchtime on the last Friday of each month, 12:30-1:30 PM (AEDT). We start each meet-up with announcements, or occasionally a special topic discussion, then discuss problems that attendees have brought along with them.

We also have a Slack workspace where members of the consulting network can communicate between meetings, or post problems or relevant materials they would like to discuss during a meeting.

[Zoom link](#)

Password: 660145

[Slack Workspace link](#)

Machine Learning with Python

5 Aug 2023, 9:00 AM (AEST) – 6 Aug 2023, 12:00 PM (AEST), held online

The Statistical Society of Australia's Victorian and Tasmanian branch warmly invites you to a workshop on machine learning with Python, presented by Patrick Robotham from Magic.

This two-day workshop aims to enable data scientists to incrementally incorporate Python in their workflow. After an introduction of Python basics, the workshop focuses on developing Python models in a workflow framework that is most commonly seen in a production environment. Participants will benefit from a gentle introduction to Python on the first day before learning some powerful modelling concepts and tools on the second day.

For more information and to register click [here](#).

Sampling course

12 Oct 2023, 9:00 AM (AEDT) – 8 Dec 2023 (AEDT), held online, one hour a week

The Social Research Centre and the Statistical Society of Australia (SSA) are very proud to offer statistical training from the International Program in Survey and Data Science (IPSDS), a joint program of the University of Mannheim and the Joint Program in Survey Methodology at the University of Maryland.

The 8-week online sampling course is aimed at working professionals who are interested in expanding their data collection skills. The course will be available

fully online with prerecorded videos that students are expected to watch on their own time plus weekly 1-hour live interactive sessions with the instructor, Raphael Nishimura, Director of Sampling Operations at the University of Michigan.

By the end of the course, you will...

- understand the basic ideas, concepts and principles of probability sampling from an applied perspective
- be able to identify and appropriately apply sampling techniques to survey design problems
- be able to compute the sample size for a variety of sample designs
- understand and be able to assess the impact of the sample design on survey estimates
- be able to estimate the precision of the survey statistics using different estimation techniques

Please book before 15 August 2023 to take advantage of the Early Bird Deadline For more details and to register click [here](#)

Check out these pre-conference workshops held in Wollongong on 10 December 2023:

- [Essential Skills for Statistical Communication](#) presented by Professor Sir David Spiegelhalter, University of Cambridge and Dr Linden Ashcroft, University of Melbourne

The workshop will include a panel discussion. Presenters Prof David Spiegelhalter and Dr Linden Ashcroft will be joined by applied mathematician and science communicator [Dr Sophie Calabretto](#), and ABC journalist and 'lapsed mathematician', [Casey Briggs](#), to share their experiences.

- [Statistical Consultancy – The Essentials for Getting Started and Ongoing Success](#) Presented by Professor Julie Simpson, University of Melbourne, A/Professor Emily Karahalios, University of Melbourne and A/Professor Karen Lamb, University of Melbourne, A/Prof Sue Finch from The University of Melbourne and
 - [Deep Statistics for More Rigorous and Efficient Data Science](#) presented by Professor Xiao-Li Meng, Harvard University
-

[Australian Statistical Conference \(ASC\) and Australian Conference on Teaching Statistics \(OZCOTS\)](#)

10th - 15th December 2023, Wollongong

Early Bird deadline is 31 July 2023!



Other events

Current Vacancies in SSA's Career Centre

[Professor in Financial Mathematics or Mathematical Statistics](#)

Other

University of Leuven (KU Leuven)

The Faculty of Science at KU Leuven (Belgium) ...

[Lecturer in Mathematics and Statistics](#)

Western Australia

Murdoch University

See Murdoch University's web page for information ...

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Internal Revenue Service

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