

From: [Statistical Society of Australia](#)
To: [Marie-Louise Rankin](#)
Subject: Stats Matters & Events
Date: Thursday, 28 September 2023 3:40:13 PM



STATS MATTERS & EVENTS

28 September 2023

Dear Marie-Louise,

This morning, I had the opportunity to attend a fun webinar titled "How Associations Can Thrive in the Age of Artificial Intelligence (AI)."

The session commenced with a simple question: "What is AI?" The answer was swiftly provided, quoting Dennis Hassabis, the CEO of Google DeepMind: "AI is the science of making machines smart." And smart they are! Just this week, I stumbled upon [HeyGen's AI translation tool](#). It's incredible! This software allows real-time translation in your own voice, complete with lip-syncing capabilities. This is the kind of technological leap that blurs the line between reality and science fiction!

This morning's webinar facilitators emphasised that even some of the skeptics among us are, knowingly or unknowingly, reliant on AI-driven technologies, ranging from virtual assistants like Siri and Alexa to Bixby for Samsung loyalists like me.

Dray McFarlane from [Sidecar](#) revealed a staggering insight: AI's capabilities are doubling roughly every six months. With a landscape that shifts on almost a daily basis, even the experts find it challenging to stay up to date. Case in point: During the webinar, Dray was gently corrected by a colleague on a piece

of data that had been overtaken by new information overnight. Such is the frenetic pace of innovation in the AI sector.

What sets AI apart is its accessibility; it's not the exclusive domain of giant corporations. Having an even playing-field is a wonderful opportunity for smaller organisations and professional associations like SSA. With often limited human resources, AI could provide an invaluable toolset for automating tasks and enhancing member experiences. Many associations have already capitalised on AI to personalise content recommendations based on past user behaviour, thereby elevating the member engagement level and user experience.

So, who knows? Perhaps in the not-so-distant future, you'll encounter an AI-powered chatbot, guiding you through our website and assisting you with all your queries.

The possibilities are endless, but I would miss our chats!

[Marie-Louise Rankin](#)

Executive Officer

Read newsletter in your [browser](#)

In this newsletter:

[ASC and OZCOTS Program available now!](#)

[Unveiling Diagnostic Test Realities: The Imperfect Science of Disease Detection](#)

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[The latest Random Sample Podcast with guest Simon Jackman](#)

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ASC and OZCOTS Program available now!

We are delighted to let you know that the ASC/OZCOTS program is now available online. The program can be accessed [here](#).

Every presenter should have received an email earlier this week advising them of the program. Presenters were asked to look for their abstract in the program and check their details carefully. They can search for their abstract via the Titles or Presenters tab on the left-hand side of the program. If any presenter details need to be updated, please let the ASC/OZCOTS 2023 Programming Committee know by **15th October** by emailing asc.ozcots2023@gmail.com with the submission ID in the subject line.

Presenters who haven't yet registered for the conference, must do so by **15th October or they will be removed from the program**. Registration details are available on the [conference website](#).

Guidance for ASC Oral and Poster presentations are available [here](#).

Unveiling Diagnostic Test Realities: The Imperfect Science of Disease Detection

I love it when I come across articles written by our members, so obviously Adrian Barnett's and Nicole White's article "Tests that diagnose diseases are less reliable than you'd expect. Here's why", published in "The Conversation" last week, caught my eye.

Professor Adrian Barnett is Professor of Statistics at QUT and a former president of the Statistical Society, while Nicole White is a Senior Research Fellow - Statistics, also at QUT. You'll recognise Nicole as one of the Co-Chairs of the ASC23 Scientific Program Committee.

Their article discusses the reliability of diagnostic tests for diseases and why they are not always as accurate as one might hope and expect.

One example the authors highlighted is the prostate-specific antigen (PSA) screening test for prostate cancer, which catches around 93% of cancers but has a high false-positive rate, leading to unnecessary stress and further, sometimes painful testing for many individuals. Similarly, many of us have a story to tell where a rapid antigen test for COVID-19 yielded inaccurate results, with only 52% accuracy in asymptomatic cases and 89% accuracy in symptomatic cases.

The article emphasises that the variability in test results can be attributed to factors such as individual differences, extraneous variables like the time of day or recent eating and even the accuracy of the testing equipment itself. It also discusses the issue of small sample sizes used in developing diagnostic models, which can lead to inaccurate predictions. According to Adrian and Nicole, there are inherent limitations, including data problems and the randomness of some diseases or illnesses, despite the promise of combining big data and advanced modeling techniques for more precise predictions.

The authors conclude that diagnostic tests will never be perfect. Acknowledging their imperfections will allow informed discussions between doctors and patients about test results and the next steps to take.

Read the full article [here](#).

Cracking the code of Open Source AI: Balancing rights and innovation

Just this week I came across an interesting article by Alex Woodle published on the [Datanami](#) website. In his article titled "Rethinking 'Open' for AI", Woodle discusses the evolving concept of "open" in the context of artificial intelligence (AI) and the challenges it presents. Woodle raises questions, such as what constitutes open source AI, how copyright and patents apply in the age of AI and whether consumers have the right to opt out of data collection.

As he explains, historically, the definition of *open source* in technology was relatively clear-cut, with human-generated content being eligible for copyright or patent protection, while machine-generated content like binary code was not. However, as technology has advanced, particularly with the emergence of generative AI models trained on public data, existing copyright laws may no longer be suitable for the era of AI.

Introducing the Open Source Initiative (OSI). OSI is actively exploring these issues through its "Defining Open Source Deep Dive" program. They are seeking input from the community and experts to develop a new definition of *open source for AI*. The process involves research, workshops and discussions with the goal of submitting a new definition by next year.

Woodle refers to Stefano Maffulli, Executive Director of OSI, who suggests that striking a balance between data protection and AI innovation is crucial. While strengthening copyright protections may benefit individual creators, it could hinder the growth of AI innovation, favoring tech giants with vast resources.

It's a complex issue and finding a balanced solution that considers various perspectives is going to be challenging.

Read the full article [here](#).



**What you need to know about
Referendum Polling**

**THE
RANDOM
SAMPLE**

Prof. Simon Jackman

**Hosted by:
Cynthia Huang**

TheRandomSample.com.au

The latest Random Sample Podcast with guest Simon Jackman is out!

Our guest is Sydney University Professor Simon Jackman, who works at the intersection of Statistics and the Social Sciences. The episode explores polling/surveys for the Voice to Parliament referendum, and what makes polling for a referendum different than polling for other elections. It's a great discussion about the mechanics and statistics of polling.

Listen to the podcast [here](#).

Mentioned in previous newsletters:

Nurture your statistical career – Join SSA's 2024 Mentoring Program

Applications will open on 2nd October and close on 30 October. The application form will be available from 2nd October on the [SSA Mentoring website](#).

SSA Events

NSW Branch of SSA: Early Career and Student Statisticians Career Event 2023

28 Sep 2023, 6:00 PM – 8:00 PM (AEST), The Bevery, the University of Sydney

The Statistical Society of Australia's New South Wales branch cordially invites all undergraduate, postgraduate, and early-career statisticians and data scientists to our Annual Event for Early Career and Student Statisticians! This event is one you absolutely can't miss.

Why Attend?

- **Inspiring Speakers:** We've gathered a lineup of inspiring early-career and mid-career professionals from diverse industries. They'll share their journeys, achievements, surprises, and advice.
- **Networking:** Engage with like-minded peers and our esteemed speakers during the networking session.
- **Catering and Drinks:** Enjoy delicious refreshments on us!

Meet Our Speakers:

Dr. Kerry Roberts - AMP Bank
Olga Yevtushenko - SEEK
Dr. William Tong - Canva
Dr. Chen Chen - NSW Education Standards Authority
Dr. Marcel Keller - CSIRO's Data61
Jordan Hedi - NSW Ministry of Health

Admission: Free for SSA members; \$20 for non-members (students can register for a one-year student membership for \$20 and attend for free).

Questions? Contact secretary.nswbranch@statsoc.org.au.

To register click [here](#).

Statistical Consulting Network Monthly Meet-Up

29 September 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](#)

Canberra Branch Meeting -- Bayesian Inference for Construction of Inverse Models from Data

10 Oct 2023, 5:45 PM – 7:00 PM (AEDT), In-person and online via Zoom

SSA Canberra invites you to its September (technically first October) branch meeting of 2023, which is joint with the ABS, and will feature **Robert Niven from UNSW Canberra** present on the topic of "**Bayesian Inference for Construction of Inverse Models from Data**"

This talk considers the inverse problem $\mathbf{y} = f(\mathbf{x})$, where \mathbf{x} and \mathbf{y} are observable parameters, in which we wish to recover the model f . Examples include dynamical systems or combat models with $\mathbf{y} = d\mathbf{x}/dt$ and $\mathbf{x} = \text{parameter}(s)$, water catchments with $\mathbf{y} = \text{streamflow}$ and $\mathbf{x} = \text{rainfall}$, and groundwater vulnerability with $\mathbf{y} = \text{pollutant concentration}(s)$ and $\mathbf{x} = \text{hydrological parameter}(s)$. Historically, these have been solved by many methods, including regression or sparse regularization for dynamical system models, and various empirical correlation methods for rainfall-runoff and groundwater vulnerability models. These can instead be analyzed within a Bayesian framework, using the maximum a posteriori (MAP) method to estimate the model parameters, and the Bayesian posterior distribution to estimate the parameter variances (uncertainty quantification). For systems with unknown covariance parameters, the joint maximum a-posteriori (JMAP) and variational Bayesian approximation (VBA) methods can be used for their estimation. In this seminar, the Bayesian theoretical foundations are first explained, and the method is then demonstrated for a number of dynamical and hydrological systems.

If you are interested in attending the dinner, please let the Canberra Branch know by **5pm Monday 9 October** by entering your details at [SSA Canberra Branch dinner attendance sheet](#) or contacting Warren Muller (warren.muller@csiro.au ; 0407 916 868).

SSA Vic & Tas Belz Lecture

Join us for the SSA Vic & Tas branch's annual Belz Lecture, where we'll hear from Professor Inge Koch in her talk titled "Mathematics, Gender and Statistics". Following the talk in-person attendees are invited to join us for dinner to be held at University House The Woodward

Tuesday 17th October, 5:45pm - 7:15pm AEDT, The University of Melbourne or online via Zoom

Registration

followed by the

SSA Vic & Tas Belz Lecture Dinner

The Victorian and Tasmanian Branch of the Statistical Society of Australia warmly invites members and guests our to premier social event of the year, the Belz Dinner. The Belz Dinner will be held at University House at the Woodward from 7:30PM. Join us for a three-course dinner and beautiful views.

Tuesday 17th October, The Woodward, University House, The University of Melbourne

Registration

ECSSN and NZSA October Webinar: An academic journey in pursuing the art of statistics - Dr Emi Tanaka

26 Oct 2023, 3:00 PM (AEDT), online

Statistics can be considered both an art and a science.

The science of statistics is concerned with the mathematical, computational, or formal methods to abstract procedures or proofs related to extracting targeted information from theoretical or empirical data. This scientific approach is characterised by rigour, precision and exactness, ensuring that statistical analyses and conclusions are based on sound principles and valid methodologies.

The art of statistics involves the creative and interpretive elements of working with data. It includes the human judgement, intuition and understanding in the statistical process or communication that ultimately feeds in as input for conducting the "science". Concrete examples include making (informed)

decisions for data pre-processing, defining data structure for study designs, and interpretation of the statistical results.

In practice, we require both the art and science of statistics to be effective. However, research and teaching of statistics is skewed towards the science, and there is little formal or systematic training for the art of statistics. In this talk, Emi will share her academic journey and demonstrate some of her research that leans towards the art of statistics through reforming the approach to statistical software as cognitive tools that enable the science.

To register click [here](#).

[Statistical Consultancy – The Essentials for Getting Started and Ongoing Success](#)

10 December 2023, Wollongong

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.

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

**ASC & OZCOTS
2023**

AUSTRALIAN STATISTICAL
CONFERENCE AND
AUSTRALIAN CONFERENCE
ON TEACHING STATISTICS

10 - 15
Dec 2023

Register Now!

Wollongong, NSW



Register at: asc2023.org

ASC and OZCOTS 2023 Social Events

[Early Career and Student Statisticians Network ASC Social](#) on 12 December 2023, held at the Illawarra Brewery's outdoor terrace at WINN stadium. The ECSSN is organising a social get-together during the ASC2023! They are inviting students, early career and more senior statisticians to join them a lovely beach view and network with like-minded people you might not see very often, plus have some fun, nibbles, and drinks!

[Statistical Conference Dinner](#) on 13 Dec 2023, at the Grand Ballroom at the Sage Hotel. Just minutes from the beach, come and join us for a three-course dinner. (You register on the same page as the conference registration page)

[OZCOTS 2023 Social](#) on 14 Dec 2023, at Lucia's by the Sea, next to the Novotel Hotel. The OZCOTS committee invites you to come and join them for a lovely meal and catch-up at a beautiful beach front venue.

Other events

The **Time Series and Forecasting Symposium** is back! Hooray!

The TSF2022 Symposium will be held in-person on 1st and 2nd of December 2022. The symposium webpage is [here](#). Please encourage your students to submit an abstract for the best student paper competition.

Important information:

Dates & Time:

9am – 5pm, Thursday 1 December 2022 & Friday, 2 December 2022

Venue:

The University of Sydney CBD Campus, Level 17, 133 Castlereagh Street, Sydney

Keynote speakers:

Prof Gael Martin (Monash University) and Prof Rodney Strachan (University of Queensland)

Symposium webpage: <https://sydney.edu.au/business/our-research/research-groups/time-series-and-forecasting/symposium.html>

Local Organising Committee: Boris Choy (Co-Chair, USYD), Nate Wichitaksorn (Co-Chair, AUT), Eric Cheung (UNSW), Chao Wang (USYD), Jianxin Wang (UTS), Alice Gao (USYD)

Enquiries: tsf.symposium@sydney.edu.au or boris.choy@sydney.edu.au

Registration:

All registrations include symposium material, refreshments, lunches and symposium dinner

Registration Fees (incl GST): A\$250 (\$300 after 15 November) for academic and industry participants and A\$125 (\$150 after 15 November) for full-time students.

Please register at the symposium webpage [here](#) on or before 15 November to enjoy the early bird rate.

Abstract Submission:

To submit an abstract (up to 250 words) for oral or poster presentation, please send it to tsf.symposium@sydney.edu.au on or before 31 October.

Best student paper competition:

TSF2022 will have a special session in the afternoon of 2 December for student oral presentations and a Best Student Paper award will be given. Up to six abstracts submitted by students will be selected by a panel to present in this session. If you want your paper to be considered for presentation in this session, please indicate in your email.

Thanks for your support to the Time Series and Forecasting Symposium. We look forward to seeing you again in TSF2022.

Best regards,

Boris & Nate

Boris Choy | Co-Chair, TSF2022 Symposium | boris.choy@sydney.edu.au

Associate Professor | Discipline of Business Analytics | The University of Sydney | NSW | 2006 | Australia

Nuttanan WichitaKsorn | Co-Chair, TSF2022 Symposium | nuttanan.wichitaksorn@aut.ac.nz

Senior Lecture | Department of Mathematical Sciences | Auckland University of Technology | Auckland | New Zealand



4 - 7 January 2024
Melbourne, Australia

IMS - Asia Pacific Rim Meeting 2024 - Melbourne, Australia

Abstract submission is now open for talks in contributed sessions.

Sessions will be organised into general themes. Each talk will be a total of 20

minutes in length (about 15-16 minutes for the talk and allow for 4-5 minutes of questions).

Early career researchers and PhD students are particularly encouraged to submit abstracts to present their work at the conference.

Once your abstract is submitted, the Committee will notify acceptances on a rolling basis. You should expect a notification with the outcome within approximately 2-3 weeks of submission. Once your abstract is accepted, you will be provided with further instructions on finalising your registration for the conference.

Please submit your abstract via Oxford Abstracts through the link at <https://app.oxfordabstracts.com/stages/6093/submitter>

Details: <https://ims-aprm2024.com/submissions/>

Early bird ticket price is extended until October 14. Register [here!](#)

We are still calling for Contributed Talks, please submit here. Deadline for abstract submission is 31 October.

Three Plenary Speakers: Ruth Williams (University of California – San Diego), Bin Yu (University of California – Berkeley), Jianqing Fan (Princeton University)

Bayes on the Beach 2024

[2023 International Biometric Society Australasian Region conference,](#)

27 Nov 2023 – 1 Dec 2023, Bay of Islands, NZ

[AMSI Summer School](#)

8 January - 2 February 2023, Canberra

Current Vacancies in SSA's Career Centre

Internal Revenue Agent (Examiner) - DIRECT HIRE (12 MONTH REGISTER)

Multiple Locations (See Description)

Internal Revenue Service

Summary: Positions under this announcement are ...

[0110379 Lecturer/Senior Lecturer \(Teaching and Research\) - Business Analytics](#)

New South Wales

The University of Sydney

Full time continuing teaching and research postJoin ...

[Statistical Consultants](#)

New South Wales

Stats Central UNSW

Work type:Full Time / Part Time Location:Sydney, ...

[Lecturer in Applied Statistics](#)

Western Australia

Curtin University

A new role for a statistician to teach data science ...

[Statistician](#)

New South Wales

Nursing Research Institute

Join a vibrant team of researchers and clinicians ...

[Senior Research Officer / Data Analyst - Inside Out Institute for Eating Disorders](#)

New South Wales

The University of Sydney

Part time (0.6FTE) / fixed term for 12 months ...

[Revenue Officer- DIRECT HIRE \(12 Month Register\)](#)

Multiple Locations (see description)

Internal Revenue Service

Duties WHAT IS THE DIVISION? SMALL BUSINESS ...

[Internal Revenue Agent \(Examiner\) - Direct Hire \(12 Month Register\)](#)

Multiple Locations (see description)

Internal Revenue Service

Duties WHAT ARE THE APPEALS (AP), LARGE BUSINESS ...

[View All Jobs](#)

If you have news from the Australian statistical community to share in Stats Matters and Events, please get in touch [with us](#)! We love getting feedback too.

[Unsubscribe](#)