
In this newsletter:

[How Did the Concept of Statistical Significance Arise?](#)

[New scholarships available for Science Meets Parliament 2023](#)

[The importance of accreditation for statisticians: Why it matters](#)

[News from the ADSN](#)

[SSA Events](#)

[Other Events](#)

[Job vacancies in SSA's Career Centre](#)

How Did the Concept of Statistical Significance Arise?

In his article "How Did the Concept of Statistical Significance Arise?" (29 January 2023, Psychology Today), Frederick L. Coolidge, Professor of Psychology of the University of Colorado, Colorado Springs, delves into the history and origin of $p < .05$ and statistical significance.

The concept of statistical significance was first introduced by Ronald Fisher in the early 1920s. It arose by chance and the essence of its trustworthiness lies in replication - if a result is obtained consistently 19 out of 20 times, it can be considered statistically significant.

Coolidge's article makes an interesting read.

[Read the article here](#)

New scholarships available for Science Meets Parliament 2023

Want a chance to attend Australia's most significant event for deep engagement between the science and technology community and policymakers at no cost?

Thanks to the generosity of their sponsors, Science & Technology Australia (STA) is offering nine scholarships to Science Meets Parliament 2023.

Scholarship winners will get access to the full program of events, including attending our Gala Dinner.

This is a once-in-a-career opportunity to build your networks, develop and sharpen your science advocacy skills, and learn how your science can influence policy.

Science Meets Parliament 2023 (SMP) will be held over two dates. SMP Online - three days of world-class training and professional development - will take place 7-9 March. SMP On the Hill on 22 March will be a full day at Parliament House in Canberra featuring meetings with Members of Parliament, our glittering SMP gala dinner, and the centrepiece of SMP 2023, the National Press Club Address.

It's the most exceptional professional development opportunity on the STEM calendar.

Scholarship applications are open now and **close on 10 February** in the following categories:

- First Nations scholarship
- LGBTIQA scholarship
- Technology scholarship
- Regional and remote scholarship
- Disability scholarship and
- Neurodivergent scholarships.

These scholarships are made possible by STA's generous sponsors: Exciton Science, the Australian Technology Universities (ATN) network, New Edge Microbials, the University of New South Wales (UNSW), the Australian Academy of Science, and Pawsey Supercomputing Research Centre.

To be eligible, you must be a member of - or employed by - an STA member organisation such as the Statistical Society of Australia (SSA).

[Secure A Scholarship To Science Meets Parliament 2023](#)

The importance of accreditation for statisticians: Why it matters

As a member of the Statistical Society (SSA), you may be eligible for accreditation. Are you wondering in what way accreditation could be beneficial to you?

Being accredited by the SSA demonstrates your competence and expertise in the field. Accreditation provides recognition of your skills and knowledge, increases your credibility and professional status, and can open up new job opportunities. While accreditation is not a requirement for practicing

statisticians (as it is with engineers, for example), it can be most helpful for certain professional roles, such as those in consulting or academic positions, assuring clients that they are receiving high-quality statistical services.

Curious about accreditation? Find out [more](#).

News from the ADSN

Earlier this week I received the following email from the Australian Data Science Network (ADSN):

"Welcome to the **February 2023 update** of the [Australian Data Science Network \(ADSN\)](#), a partnership of more than two-dozen data science research centres and organisations across the nation. The ADSN aims to connect expertise in data science across Australia, improve communication, encourage collaboration, expand opportunities, and promote our individual and collective capabilities.

Have your say!

Review of ANZSCO Codes – [“Data Scientist” and “Data Analyst” are new inclusions](#) on the Australian and New Zealand Standard Classification of Occupations (ANZSCO) released late in 2022. **Starting TODAY (1 Feb), [a comprehensive review of ANZSCO is commencing](#)** to reflect the contemporary Australian labour market. Does Data Science need a bigger presence? Have your say:

- Wednesday, 8 February: [Online Q & A session on how to make a submission](#)

ADSN is now on LinkedIn

Stay on top of everything that is happening with the ADSN and its member organisations. Just Follow the new [ADSN Linked page](#). In addition, we've created an [ADSN LinkedIn Group](#). The group will allow you to post jobs, events and news from your organisations and have discussions about things that are important in the field. The page will feature the latest content curated by the ADSN.

Upcoming Events across the ADSN

These can all be found on [ADSN events page](#):

[ARDC HASS Research Data Commons and Indigenous Research Capability Symposium](#)

2-3 February, Melbourne/Naarm

Free registrations are now open! The symposium will showcase the research infrastructure we are creating in the HASS RDC and IRC Program and the potential for improved research outcomes that it supports.

[More information / Register](#)

[DARE Centre 2023 Symposium: Data. Domains. Decisions](#)

7 February, Sydney

The ARC Training Centre in Data Analytics for Resources and Environments (DARE) will be showcasing work from its multidisciplinary, world-class data scientists and collaborations with partner organisations. Join DARE for specialist presentations on how its academic and industry researchers are using data science to quantify uncertainty in complex models of natural systems at scale.

[More information / Register](#)

[HASS Research Data Commons and Indigenous Research Capability Computational Skills Summer School](#)

7-8 February, Sydney/Gadigal Country

Free registrations are now open! At this 2-day, face-to-face event, you will learn essential digital skills for HASS research, covering:

- Basic data management skills
- Using Jupyter Notebooks
- The Australian Text Analytics Platform
- Using the Indigenous Data Catalogue

[More information / Register](#)

[ARDC Digital Research Skills Summit](#)

9-10 February, Sydney

The annual skills summit provides a vibrant forum for eResearch skills communities to network, exchange information, share new initiatives and tackle complex, national scale skills challenges. We invite eResearch

infrastructure providers, trainers, training program managers, researchers who train and other interested parties to join the summit, shaping the development of a national data and digital research skills strategy together.

[More information / Register](#)

[ARCOS Symposium 2023](#)

15 February, 1pm – 5pm AEDT - Online

The ARCOS (Australian Research Container Orchestration Services) Symposium brings the digital research community together to share expertise, and discuss use cases of containers and kubernetes in research. Organised by the ARDC.

[More information / Register](#)

[Institutional Research Data Management Framework Showcase](#)

21 February, In-person at multi-city locations & Online

Join the ARDC and its partners to celebrate the launch of the institutional Research Data Management (RDM) Framework. 25 Australian universities, led by the ARDC, jointly developed a nationally agreed framework for RDM to guide institutions' design of policies, procedures, infrastructure and services, bringing consistency to the management of research data across the university sector.

[More information / Register](#)

[Data Science in the News Webinar: 2023 Through a Data Lens](#)

24 February, 1pm AEDT/12pm AEST - Online

The QUT Centre for Data Science is kicking off its 'Data Science in the News' series for 2023 with a peak into the future. Centre experts will explore cool new trends and ideas along with key challenges and issues for the year ahead, all through the lens of Data Science.

[More information / Register](#)

[AI for Good and the Bootstrapping Problem – Monash Prato Dialogue](#)

Thursday, 9 March, 7 -8 pm AEDT - Online

Join the Monash Data Futures Institute for the next distinguished lecture in the

Monash Prato Dialogue series, as they host Professor Shannon Vallor from University of Edinburgh. Professor Vallor will discuss the bootstrapping problem with calls to align AI with social good - a problem that also impacts related suggestions to develop more virtuous or responsible models of AI innovation. She will confront the problem of cultivating virtues and social goods of a new moral shape, and the radical cultural transformations this may entail. [More information / Register](#)"

Mentioned in previous newsletters

ASC 2023: Call for Abstract Reviewers

The ASC 2023 Scientific Programming Committee (SPC) is currently seeking expressions of interest from SSA members interested in undertaking the peer review of abstracts for the conference. All areas of statistical expertise are welcome. The Australian Statistical Conference, partnered with the Australian Conference on Teaching Statistics (OZCOTS), will take place in Wollongong from 10th-15th December 2023.

Each reviewer will be responsible for blind reviewing up to 20 abstracts of up to 300 words aligned with their area of expertise and each abstract will have 2 reviewers. Review criteria and information on how to review the abstracts will be provided once the call for reviewers closes. **Reviewers must be available to review abstracts between April and May 2023.**

Selection of reviewers will be based on SSA membership and area of expertise, with the number of reviewers based on the number of abstract submissions. If you are able to review abstracts, please complete the [online registration form](#). Abstract reviewer registrations will close on **31st March 2023**

Call for nomination: Horizon Lectures, [Australian Statistical Conference](#), 10-15th December 2023 (ASC 2023)

The Statistical Society of Australia (SSA) and ASC 2023 Scientific Programme Committee are delighted to open nominations for the inaugural Horizon Lectures, to be given at ASC2023 in Wollongong, 10th- 15th December 2023.

The Horizon Lectures aim to recognise emerging leaders in Australia's statistics community and their contributions to advancing statistical practice across academia, government, and/or industry. Lectures will be awarded to mid-career statisticians working in any discipline who have made an impact within their field(s) of expertise

and have demonstrated leadership in building capacity in statistical expertise within Australia.

Up to three (3) Horizon Lectures will be awarded for presentation at ASC2023. All Lectures will be presented together as a plenary session to all conference delegates. Lectures can be on any area of statistics in line with the awardee's expertise. Each awardee will receive up to \$2,500 to cover conference and travel costs.

Nominations involve a written statement (up to 1,000 words) summarising how the nominee meets the award selection criteria. Nominees must be a member of the SSA and be employed as a statistician in Australia. Nominations must be supported by another member of the SSA.

Full details on eligibility, award selection criteria and submission are available in the nomination form, available on the [conference website](#). Nominations must be submitted by **5 pm AEST, 28th February 2023**. Late nominations will not be accepted.

Questions about the Horizon lectures can be sent to ASC 2023 Scientific Programming Committee at asc.ozcots2023@gmail.com

SSA Events

Expression of Interest in Survey and Data Science Courses in 2023–24

These courses will be held online, one hour per week, over four to six weeks, depending on the course.

Due to the high demand for the Sampling Course we offered in 2022 and strong interest in other courses from the [International Program in Survey and Data Science](#) (IPSDS) Masters program, the Social Research Centre (SRC) and Statistical Society of Australia (SSA) have partnered again to expand IPSDS course offerings in Australia.

The IPSDS is a program of the University of Mannheim and the Joint Program in Survey Methodology at the University of Maryland. It is directed by Prof. Frauke Kreuter, who is professor at the Ludwig Maximilian University of Munich.

These course offerings are motivated by the lack of Australian equivalents.

If you are interested in the Item Nonresponse, Sampling, Big Data/Machine Learning for Surveys and/or Weighting courses please register your interest so that we can determine whether there is sufficient demand.

The courses to be offered in 2023–24 are:

Course	Dates	Instructor(s)	Prerequisites
<u>Item Nonresponse and Imputation</u>	Jun–Jul 2023 (4 weeks)	Prof Jörg Drechsler	Familiarity with generalised linear models and basic knowledge of R
<u>Sampling I</u>	Oct–Nov 2023 (8 weeks)	Dr Raphael Nishimura	A sound background in applied statistics, proficiency in mathematics, including basic algebra
<u>Introduction to Big Data/Machine Learning I</u>	Jan–Feb 2024 (4 weeks)	Prof Frauke Kreuter and Prof Trent D. Buskirk	None, but undergrad statistics background, some familiarity with regression models assumed and familiarity with R recommended
<u>Sampling II</u>	Mar–Apr 2024 (4 weeks)	Dr Raphael Nishimura	Sampling I or equivalent; R skills helpful
<u>Step-by-Step in Survey Weighting</u>	Mar–Apr 2024 (4 weeks)	Dr Anna-Carolina Haensch	Sampling I or equivalent
<u>Machine Learning II</u>	Sep–Oct 2024 (8 weeks)	Prof Christoph Kern and Prof Trent D. Buskirk	Machine Learning I or equivalent and basic knowledge of R

Basic R skills can be acquired from a SSA R workshop which will be offered before the Machine Learning course or online e.g. via [DataCamp](#) or equivalent.

All courses are conducted over 4 or 8 weeks period (depending on the course) with weekly 1 hour online classes in addition to assignments and exam assessment at the end of the course. Participants should expect pre-recorded videos, readings and exercises to be completed outside of the weekly meetings consistent with a master's course.

Indicative cost per course is \$1,500 (ex-GST) per attendee, with a \$1,250(ex-

GST) per attendee volume discount for organisations enrolling three or more.

We are asking for **expressions of interest** in these courses to ensure there is sufficient demand for the courses to run. Please register your interest or contact events.statsoc@gmail.com with any questions.

[The Necessary SQL - An Introduction to SQL with Daniel Fryer](#)

6-February 2023, 9:00 AM (AEDT) – 7 February 2023, 5:00 PM (AEDT),
Online via Zoom

The Statistical Society of Australia (SSA) and the Social Research Centre (SRC) proudly offer the following workshop:

Small Area Estimation Workshop: Combining Census and survey data to create reliable local-area estimates

8 Mar 2023, 1:00 PM – 5:00 PM (AEDT), held online.

This workshop will give an overview of considerations, methods, tools and outputs for small area estimation. Topics covered will include the following:

- * Design considerations, including questionnaire items and sources of auxiliary data;
- * Preparation of survey and auxiliary data for modelling;
- * Model building and production of estimates; and
- * Options for presentation and visualisation of results.

Material and examples will focus on unit-level models for small *areas*, but mention will also be made of small *groups* in the population to which the same techniques can be applied. Comments will be made about implementation of the methods in R, including package recommendations, but references to the applicable literature will be provided to enable working with other software.

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

Save the date: ASC and OZCOTS 2023

10-15 December 2023, University of Wollongong, NSW

Attending the Australian Statistical Conference 2023 (ASC2023) could offer several benefits, including:

- Professional development: ASC2023 provides an opportunity to learn about the latest developments in the field of statistics, potentially expanding your knowledge.
- Networking: You can meet and connect with other professionals in your field, including fellow statisticians, data scientists, and academics. This could lead to new collaborations and opportunities for professional growth.
- Presenting your work: You can present your own work at ASC2023, showcasing your expertise to a wider audience and receiving valuable feedback from your peers.
- Exposure to new ideas: Attending ASC2023 could expose you to new and innovative ideas in statistics and data analysis, allowing you to stay up-to-date with the latest trends and developments in your field.
- Overall, attending ASC2023 could be a valuable investment in your professional development and a platform for you to grow and advance your career in statistics.

So please save the date: 10-15 December 2023, University of Wollongong, NSW!

[Find out more](#)

Other events

Workshop: Data Storytelling Workshop with David McCandless

Wednesday, 22 March 2023, 8.00am - 12.00pm AEDT (Virtual Session)

Attention Data Enthusiasts! Join world-renowned data journalist and visual storyteller, David McCandless, for a one-of-a-kind Data Storytelling Workshop. Learn how to turn data into compelling narratives and visually appealing infographics.

This hands-on workshop will cover the latest techniques and tools to help you create impactful and memorable stories from data. Don't miss this opportunity to learn from the best!

[Register here](#)

Register Now: 2023 AMSI-ANZIAM Lecture Tour

2023 Australian Mathematical Sciences Institute (AMSI) - Australia and New Zealand Industrial and Applied Mathematics (ANZIAM) Lecturer Professor Konstantin Avrachenkov will present a series of specialist talks and a public lecture on his five-city tour of Australia from 13 – 22 February.

Visiting Adelaide, Melbourne, Canberra, Newcastle, and Brisbane.

[Learn more](#)

Job vacancies in [SSA's Career Centre](#)

Senior Psychometric Analyst

New South Wales

Department of Education

Ongoing Full-Time Location: Parramatta (Hybrid ...

Biostatistician

New South Wales

University of Sydney

Full time fixed term (part time considered) until ...

Data Analyst

Queensland

Queensland Aboriginal and Torres Strait Islander Child Protection Peak

This role focuses on the analysis of data sets ...

Postdoctoral Research Associate in Statistical Bioinformatics

New South Wales

University of Sydney

Full time 18 month fixed term, located on the ...

Associate Professor/Professor in Computational Algebra

New South Wales

University of Sydney

Exciting opportunity for an outstanding senior ...

[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](#)