



Director's Report

Management Committee Meeting

7 October 2021

1. Summary

The report provided at the last Management Committee meeting in August provided a comprehensive overview of how we have firmly established the Centre for Data Science as a Tier 1 Centre. Research highlights since this meeting include the formal virtual launch of the Government systems domain, round two of the First Byte scheme and the Second Byte Scheme, Domain/Program projects and the commencement of a Professor of Practice as a Data Scientist in Residence.

Engagement highlights include the commencement of further co-funded HDR scholarships and projects for postdoctoral research positions have also been established in collaboration with external partners.

A meeting of the Centre's Advisory Board is planned for November 2021, following from the previous meeting held in November 2020.

2. Centre Profile

Leadership

There have been no changes to the CDS Core Leadership team since the previous meeting.

The Leaders and Co-Leaders of the CDS Research Programs have remained stable as the Co-leaders of the research Domains with the addition of Divya Mehta as co-lead for the new Sports Systems Domain.

Administrative Appointments

Amy Rawson finished up in the role of part time ADSN Digital Communications Coordinator on 17 September 2021.

The position of the Senior Project Officer has progressed to the appointment stage. The Position for Project Officer has been put on hold. The Senior project officer will lead the development of research networks and communications for CDS and ADSN.

Data Scientist in Residence

The Centre has appointed a Professor in Practice as its inaugural CDS Data Scientist in Residence. Dr Rachel Thomas commenced in the role on 16 August 2021.

Centre Participants

Centre participants have remained stable since the last Management Committee Meeting.

3. Activities/Events

The Centre continues to hold a number of events through a combination of in-person, virtual and mixed modes.

Data Science in the News

The Data Science in the News webinar has continued each month. Going for Gold: Data Science and the Olympic Games was held in August with over 50 live attendees. September's edition focused on the Who, Why and How of the Australian Census and we were joined by panellists from the Australian Bureau of Statistics. As this series remains focused on outreach and increasing how data science can impact everyday lives, our next topic is likely to be around Covid-19 vaccinations and what's next in terms of the pandemic. Recordings of the webinars are accessible via the Centre's [website](#).

Data Science Under the Hood

Further seminars in this series, which aims to disseminate, to the DataScience@QUT network, fundamental and cutting-edge data science methods that have been developed across several disciplines, took place in late August and September.

- 26 August 2021: Data Fusion and Knowledge Discovery using Factorization methods
- 28 September 2021: Bayesian Data Science for Big Data

The next seminar is scheduled for 27 October 2021 with details to follow.

Distinguished Visitors Seminar Series

Assistant Professor Linda Tan of the National University of Singapore held our most recent distinguished visitor seminar on Efficient Data Augmentation for State Space Models on 21 September 2021. In the absence of international, or even national travel, this seminar series has allowed colleagues from around the globe to share their research with Centre participants.

Early Career Seminar Series

Our ECRs (HDR students and Postdoctoral Researchers) have also initiated an 'Early Career Bayes Seminar Series' to enable ECRs to give invited presentations. In addition to being valuable for knowledge exchange, this series provides opportunities for ECRs to build their profile despite covid-19 restrictions to travel and face-to-face meetings.

Recent additions to this series were:

24 August 2021: Laura Cartwright, University of Wollongong - Emulation of Lagrangian particle dispersion model sensitivities using a convolutional variational autoencoder.

31 September 2021: Francesca Crucinio, University of Warwick - A particle method for Fredholm Integral Equations of the First Kind

HDR Academy

August and September events were held for the CDS HDR Academy. These events have had a particular focus, August was "Analysis and Visualization of Ecoacoustics Data: A New Data Intensive Approach to Fauna Monitoring", by Prof Paul Roe. September was another workshop focussing on publication strategy which was facilitated by Professor Glen Tian.

OUTBANDS

In collaboration with QUTBANDS (QUT Business Analysis and Data Science Club), a panel, Innovating through an Evolving World, was held on 2 September 2021. This panel was moderated by CDS Deputy Director Professor David Lovell and the Centre Director was one of 6 panellists. This event aimed to guide students on current industry trends and to assist students prepare for the real world.

4. Research Initiatives

First and Second Byte Programs

In early 2021, the CDS rolled out the inaugural First Byte Program for ECR researchers. The second rollout of this Scheme is underway, with a concomitant Second Byte Program for mid-career researchers. These programs seek to fund researchers to undertake high-quality projects that are strategically aligned with CDS Research Programs and Domains. They particularly encourage research collaboration between CDS Participants and the wider data science community, and encourage research that is likely to lead to further grant funding. First and Second Byte projects are funded to a maximum of \$10,000 and \$20,000, respectively.

12 First Byte projects were approved in the first round and have commenced. 10 projects have been funded through the second round. 14 Second Byte projects were awarded through the inaugural round. See:

- [CDS First Byte Funding Program 2021](#)
- [CDS First Byte Funding Program 2021 - Round 2](#)
- [CDS Second Byte Funding Program 2021](#)

Program/Domain Funding

The Centre has awarded each program/domain up to \$50k to fund research projects which are strategically aligned with its vision. Similar to the First and Second Byte scheme, this initiative encourages research collaboration between CDS participants, promote diversity and inclusion and encourages research that is likely to lead to further grant funding. These projects are due for completion by the end of 2021.

Scholarships

We are committed to supporting the next generation of data scientists and to that end have awarded 8 HDR scholarships through the 2021 [CDS HDR Scholarship Scheme](#).

6 students have also been awarded write up scholarships through the Centre's [write up scholarship scheme](#).

It remains difficult to find suitable students for industry co-funded scholarships, however we have had an additional student commence in one of the Australian Bureau of Statistics co-funded projects.

Reading Groups

Since the last management committee meeting, two reading groups have been developed.

The AI Ethics reading group has commence under the guidance of Dr Rachel Thomas. This event mirrors a larger external event also facilitated by Rachel at the Qld AI Hub.

The Human Data Interaction Reading group has also commenced within the [Data Focused Decision-Making](#) program.

5. Networks and Communications

Twitter followers have grown from 788 followers (as of 9 August, 2021) to 1023 followers (as of 1 October, 2021). News stories regarding the Centre are also posted on the CDS Website [here](#).

6. Equity and Diversity

A Women in Data Science national conference was held in September 2021, with 50+ women researchers invited to participating. Participants were CIs and AIs on the proposed CoE in ‘Shaping the Future of Data Science’.

Our funding schemes (e.g., PhD top-ups, First Byte grants) continue to explicitly seek and consider information about the potential for the student-supervisor-project combination to promote diversity and inclusion. Review panels are convened to ensure gender balance.