



Centre for
Data Science

Director's Report

Steering Committee Meeting

14 October 2022

Strategy

The Centre for Data Science Core Team has reflected on the strategic plan and the strategies outlined within remain the same.

The Centre strives to increase opportunities for collaborative research in data science and values the importance of mutual attribution across various QUT Centres, Schools and Faculties.

1. Annual Showcase

The Annual Centre for Data Science showcase was held over two days on Monday 19 and Tuesday 20 September. The full program is attached as an appendix however Monday was focused on HDR and ECR members with presentations and workshops; and Tuesday included MCRs and Program & Domain presentations and workshops. These two days provided not only an opportunity for our participants to showcase their work but provide input into Centre activities and initiatives for the remainder of 2022, 2023 and into the future.

HDRs and ECRs proposed ideas such as: (a) conference repository/hub and resources to prepare; (b) quality industry events and hackathons; (c) enhancing HDR engagement in First Byte projects and (d) connection of like minded researchers.

Day two provided insights into: (a) grant applications and collaborations; (b) data governance; (c) career development opportunities; (d) computing infrastructure and (e) international engagement.

This feedback will be incorporated into the Centre's goals, KPIs and vision for 2023.

2. Promotion of equity and diversity

The promotion of equity and diversity in data science continues to be a key strategy in creating an active and inclusive representation of Data Science across QUT. 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.

i. **Women in Data Science Day (WiDS)**

Rescheduled [event was held](#) on 15 June 2022 as part of the worldwide Women in Data Science (WiDS) initiative.

ii. **Aboriginal and Torres Strait Islander engagement**

The Aboriginal and Torres Strait Islander HDR Pathways Program (Data Science) was launched at the commencement of Semester 2. Three students (2 undergraduate and one masters coursework) have participated in the program this semester. Two students are still completing their research experience and once they conclude a report on the inaugural offering will be provided.

3. Increasing capability in data science

i. First and Second Byte Schemes

The First and Second Byte Schemes exemplify the Centre's commitment to increasing capability in data science. After the success of the schemes launched in 2021 it has been decided to offer these schemes again.

Applications are currently open for:

[CDS First Byte Funding Program 2022/2023](#) which will fund 10 projects up to \$10K for ECRs

[CDS Second Byte Funding Program 2022/2023](#) which will fund 10 projects up to \$10K for MCRs (reduced from \$20k due to underspend of funding and also CDS budget constraints).

It is expected funding will be made available 1 February 2023.

ii. Leadership

Christoph Schrank has joined Kate Helmstedt as co-lead for the Environment and Natural Systems domain. Recruitment continues to fill the vacant co-lead position in the Social Systems domain.

4. Centre Structure

The Data Focused Decision Making program has been split into two new programs:

Human Centred AI which is led by Margot Brereton and Catarina Moreira

Responsible Data Science is led by Bernadette Hyland-Wood and a co-lead is still to be confirmed.

Performance

Please see the 2022 Annual Report for updates on the Centre's performance.

The KPIs and goals are currently being reviewed as suggested at the previous steering committee meeting.

Risk Management

Risks have been identified as being around either people or data.

1. People

People risks include health and wellbeing. Risk management includes supporting staff wellbeing and supporting employment by activities such as: Peers and Pizza, HDR Academy, Seminars on behaviours and code of conduct.

2. Data

Data risks are managed by data governance mechanisms, data ethics workshops teaching good behaviour and practice surrounding data.

Finance and Resourcing

1. Finance

The budget continues to be monitored closely in collaboration with FoS Finance. The Centre is expected to expend the full budget allocation in 2022. The most recent budget from July is attached, the next finance meeting will be on October 19.

We have been advised that the Centre will receive the same budget for 2023 as received in 2022 and that the performance funding aligned with the new budget model will be in place from 2024.

2. Resourcing

i. **Administrative Appointments**

No changes have been made since the last meeting.

ii. **Data Scientist in Residence**

Rachel Thomas' appointment as the Data Scientist in Residence as concluded. Considering offering this as an Adjunct appointment in 2023.

iii. **Centre Participants**

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

Academic Matters

1. Educational programs

The Centre for Data Science would like to explore the possibility of engaging in corporate education programs.

Discussions surrounding the possibility of short courses, bespoke training continue. We would like the steering committee's guidance on this.

Brand

[brand] provides advice to the Centre Director and the relevant Executive Dean of the primary host Faculty on the Centre's impact on the University's brand, reputation and marketing strategies

TBC

Initiatives and Engagement Activities

1. Engagement Activities

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

i. **Data Science in the News**

8 webinars have been held in 2022 Data Science in the News webinar series. Topics have been: Inflation and the Australian Economy, Advancing communities in Central Western Queensland, NAIDOC Week, The War in Ukraine, the Power of Data in the 2022 Election, Future of Floods, Post Pandemic, is life just permanently digital?, and Emerging Trends in Data Science and AI. The next webinar will be held later in October on Cybersecurity.

Recordings of the webinars are accessible via the Centre's [website](#).

ii. **Data Science Under the Hood**

Since the previous meeting, 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 have taken place.

- 20 June 2022 – Mathematical models of coral reef re-growth
- 21 July 2022 – Deep learning for medical imaging applications

Seminars are planned bi-monthly with the next due to take place on 27 October. Recordings are available on the [website](#).

iii. **Distinguished Visitors Seminar Series**

Since the last meeting we have held a seminar by Sandra Johnson from ConsenSys Software, “Probably Stateless: Modelling the Feasibility of Stateless Ethereum”.

iv. **Early Career Seminar Series**

Our ECRs (HDR students and Postdoctoral Researchers) have continued to lead the ‘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:

- Thursday 26 May Mary Llewellyn (University of Edinburgh) Discretising a Continuous World: Accelerated Inference for State-Space Models via Hidden Markov Models

The next seminar is planned for Thursday 20 October and will be presented by Quan Vu (University of Wollongong) on Warped Gradient-Enhanced Gaussian Process Surrogate Models for Exponential Families with Intractable Normalizing Constants.

v. **HDR Academy**

The HDR Academy aims to connect HDR students and provide tailored workshops, opportunities and information to support their research journey. Since the last meeting the following events have taken place:

29 June 2022 - Art of Pitching your research

17 August 2022 - Communicating your research story

19 September 2022 – HDR Poster Showcase

vi. **QUTBANDS**

We have continued to engage with the student group QUTBANDS to cross promote data science activities and opportunities.

vii. **Reading Groups**

The Human Data Interaction Reading group has also continued in 2022 within the Human Centred AI program.

The reading group Discussion of Discussion Papers was also established and is led by HDR student Conor Hassan.

viii. **Networks and Communications**

Twitter followers have grown from 1528 followers (as of 5 May 2022) to 1772 followers (as of 7 October 2022). The Centre also now has a presence on [LinkedIn](#) with 688 followers (7 October 2022) up from 306 followers (5 May 2022).

News stories regarding the Centre are also posted on the CDS Website [here](#).

2. **Research Initiatives**

i. **Scholarships**

The Centre has not awarded Centre funded scholarships since the previous meeting.

The Centre has continued to establish scholarships that are co-funded with industry partners and is funding 3 PhD scholarships with Hastings Deering. 2 of these have been filled since the previous meeting.

The remaining 2 Scholarships co-funded with the ABS are currently in the process of being offered to students.

The Centre has decided not to offer top up scholarships in 2023.

3. Major Initiatives

ii. **ITTC**

Awaiting the outcome.

iii. **ARM Hub Digital AI Capability**

Submitted

iv. **CoE Collaboration**

The Centre for Data Science would like to explore collaboration with schools and centres on ARC CoE applications.

There is an opportunity for collaboration with the School of Electrical Engineering and Robotics on stage 2 of the next CoE bid particularly in the area of computer science, cybersecurity and data science.

v. **MRFF**

Title: Implementing and Evaluating a New Model of Urgent Care

Cls: Ralph, N., MacDonald, S., FitzGerald, G., Toloo, G., McGree, J., Oprescu, F., Gow, J., Gray, M., Kinnear, F.

vi. **ARC DP**

A number of members are involved in DP applications. Awaiting the outcomes.

Showcase Program

Day 1 Monday 19 September

8:30am	Arrival Tea & Coffee	OJW Room, GP-S1215
9:15am – 9:45	Welcome and Acknowledgement of Country Centre Director's update	OJW Room, GP-S1215
9:45-10:30am	1 minute pitches and meet and greet	OJW Room, GP-S1215
	Break	OJW Room, GP-S1215
10:45am	Postdoc presentations by: Dr Aloha Ambe, Dr Matt Sutton, Dr Brodie Lawson, Dr Khanh Luong,	OJW Room, GP-S1215
11:45am	ECR & HDR Activity/Workshop	OJW Room, GP-S1215
12:45pm	Indigenous Australian Data Science Activities	OJW Room, GP-S1215
1:00pm	Lunch	OJW Room, GP-S1215
1:30pm	First Byte presentations by: Dr David Warne, Dr Thirunavukarasu Balasubramaniam, Dr Md Abul Bashar, Dr Edgar Santos Fernandez	OJW Room, GP-S1215
2:30pm	15 min break go to P Block	All
2:45pm	Industry panel discussion	Atrium GP-P6
3:45pm	Poster session with networking and light refreshments presented by HDR students	The Cube GP-P4
5:00pm	End Day 1	

Day 2 Tuesday 20 September

8:30am	Arrival Tea & Coffee and networking	OJW Room, GP-S1215
9:00am	Welcome & Acknowledgement of Country	OJW Room, GP-S1215
9:05am – 9:30am	Director's Presentation	OJW Room, GP-S1215
9:30 am – 10:30 am	Second Byte Presentations by: Dr Susanna Cramb, Dr Matthew Adams/ Dr Morenikeji (Deborah) Akinlotan, Dr Simon Denman, Aspro Kate Helmstedt, Aspro Dimitri Perrin	OJW Room, GP-S1215
10:30-10:45am	Break	OJW Room, GP-S1215
10:45am-11am	Industry Engagement update	OJW Room, GP-S1215
11:00-12:00pm	5 x Program/Domain presentations: Sports Systems, Complex Data Analysis, Data for Discovery, Human Centred AI, eResearch	OJW Room, GP-S1215
12:00-12:45pm	Workshop	OJW Room, GP-S1215
12:45-1pm	Communications Update	OJW Room, GP-S1215
1pm-1:30pm	Lunch	OJW Room, GP-S1215
1:30pm-3:00pm	7 x Program/Domain presentations: Business & Engineering (first) Social Systems, Responsible Data Science, Environment & Natural Systems, Government Systems, Health and Biological Systems, Models & Algorithms (last)	OJW Room, GP-S1215
3-3:30pm	Senior Deputy Vice-Chancellor and Vice-President (Research) Distinguished Professor Christopher Barner-Kowollik.	OJW Room, GP-S1215
3:30pm – 4:00	Wrap up	OJW Room, GP-S1215
4:00pm	End of event	