[Dsi-staff-academic] DSI Newsletter — 26 May 2022

dsi-staff-academic <dsi-staff-academic-bounces@lists.lancs.ac.uk> on behalf of Data Science Institute <dsi-enquiries@lancaster.ac.uk> Thu 26/05/2022 14:23

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DSI Newsletter - 26 May 2022

News and Announcements

We are delighted to announce that Marianna Cavada will join DSI as Society Deputy Theme Lead. Marianna is Lecturer in Urban Design Policy with the School of Architecture that is part of LICA She has said 'It is an honour and gives me great inspiration to join the Data Science Institute as a Deputy Theme Lead for the Society Group and work with Dr B Knowles and the wider DSI team to advance interdisciplinary data-driven research responding to the great challenges we face currently and in the future.' We will be looking to appoint new Deputy Theme Leads for the Environment theme. This is a great opportunity to shape the theme and gain experience of DSI leadership. If interested, please contact Amber Leeson if you are interested.

Last week the Society theme had a fantastic two-day retreat on the topic of Inequalities, marking the kick-off of a new strategic focus within the DSI. Academics from across the university came together for lively interdisciplinary discussion exploring a wide range of inequalities and discovering connections between fields of health, sociology, politics and policy, economics, environment, computing, and design. We look forward to building on these conversations with further opportunities for members to meet up and collaborate in the months to come.

Thank you to Dr Julian Newman from Exeter University for his Wednesday Lunchtime Talk on 11th May. The talk title is 'A bounded-time approach to dynamics analysis'. Julian presented his joint work with Aneta Stefanovska (LU Physics) on understanding time series through the lens of dynamical analysis. The proposed framework that was presented is especially applicable to scenarios where the process time series is influenced by external factors that vary relatively slowly over time, and can be better captured through finite-time deterministic modelling rather than stochastic approaches. An interesting discussion about the applicability of the framework and its impact on data science followed. A recording of the talk is here.

This week Aidan Peppin delivered the first talk in our Wednesday Lunchtime Talk mini-series on "Trust in Al". Aidan spoke about his public attitudes and engagement research with the Ada Lovelace Institute. Aidan is involved with many of the Ada's important projects aimed at ensuring that data and Al benefit society and that these benefits are equitably distributed. In addition to providing a brief overview of these activities, Aidan provided the details of his public engagement methodologies and distilled 5 key takeaways from this work regarding trust. A link to the recording is available here. This talk will be followed in two weeks by Bran Knowles, who will be speaking about the many facets of "trust" as it relates to AI; and then by Kush Varshney of IBM (22nd June), who will be speaking about a new approach to disrupting public distrust of AI called "Humble AI"

Thank you to Brent Mittelstadt of the Oxford Internet Institute, who gave an excellent talk as part of the DSI's Distinguished Speaker series. Brent's talk touched upon two of our Society theme focus areas - Inequalities, and Trust in AI - explaining some of the complexities of and regional differences in non-discrimination law and its implications for AI. The talk centred around a publication entitled "Bias Preservation in Machine Learning: The Legality of Fairness Metrics Under EU Non-Discrimination Law", which shows that the dominant approaches to European AI fairness correspond to North American legal norms of aiming to preserve the status quo - an approach termed "bias preserving". Brent and his co-authors illustrate the legal requirement for AI to be designed to be "bias transforming", to highlight and perhaps ultimately address the structural contributors to inequalities, and they propose a checklist and metric that can be used to assess whether AI fulfils its obligation to attend to more substantive equality. We hope this is just the start of an ongoing conversation with Brent and his colleagues. The talk certainly left people with food for thought as we collectively explore issues of social responsibility and data science / AI. A recording of the talk can be watched here.

Bran Knowles was invited to speak to the 'Public Attitudes to Data and Al' (PADAI) network of cross-Whitehall organisations involved in data policy. She spoke about her work on trust in Al to a group of about 40 individuals from a range of organisations, including NHS, MOD, DIT, the home office, DCSM, ONS and many others. This talk was arranged through the Centre for Data Ethics and Innovation, a group that Bran will continue to work with as they develop their public sector algorithmic transparency standard.

Ahmed Kheiri, David Worthington and Jack Brooke have worked on a study in cooperation with Royal Lancaster Infirmary to analyse Emergency Department data from 2019-2021 to understand more about the changes in performance levels that were experienced, as well as the potential reasons for this. The main finding was that performance levels in late 2021 were worse than pre-Covid, with the primary driver being difficulties in accessing inpatient beds for patients needing to be admitted. This was made possible with DSI funding support. The report findings are <u>here</u>

At the recent DSI writing retreat some of us decided that we would like to set up a *DSI Inequalities safe data user group*. The aim of this new user group is to have a space to discuss all things safe and secure data, especially with regards to the new safe data pod at Lancaster (which allows researchers to use restricted secondary data, such as ONS data & UK Cohort studies, e.g. for complex data linkage studies), how to get access to your data for research projects (data acquisition, policies and processes), how to get user support (be it material, such as lobbying for new software in the pods, or immaterial peer support), to network and support each other, and to meet regularly, say, bi-monthly. We also want to create a lunchtime slot where people can give little work-in-progress talks at our meetings. We are soliciting expressions of interest to join this new user group. All are welcome! Just get in touch directly with Steffi s.doebler@lancaster.ac.uk, who will set up a group mailing-list via the DSI and arrange a first meeting to get us started.

The SafePod is now here in Lancaster and close to being operational. We will let you know once this running and ready for bookings. A UKDS Data Impact Fellow has written a 3-part blog on her experiences of using the SafePod Network to access UKDS data for her PhD research. You can read the blog here: https://blog.ukdataservice.ac.uk/tag/safepod-network/

Events

DSI Wednesday Lunch Time Talks Calendar Entry: 8th June at 12.30 Speaker: Dr Bran Knowles . Title: The Many Facets of Trust in Al

Abstract: Despite consensus that trust in Artificial Intelligence matters, the precious little research specifically focused on promoting this typically does not do justice to the concept of "trust". I will provide an overview of the many relevant facets of trust in AI as they relate to different stakeholders. I will then argue that promoting subject trust (as in the public's trust in AI to make decisions that affect their lives) will entail a very different strategy than that of promoting user trust. Specifically, this talk will challenge the prevailing narrative that the public needs greater transparency in the form of AI explanations. I will summarise the limitations and dangers in developing public facing explanations as a means of enabling informed consent, and argue that the public will trust AI when they can see evidence of an effective regulatory ecosystem which ensures the trustworthiness of these technologies.

Join: via Teams

Calendar Entry: Wednesday 8th June at 12.00 in the Sky Lounge. Please bring your sandwiches and join us for a chat over lunch. There are rumours of cakes and biscuits! Women++@InfoLab celebrates staff, students and academics who identify as a woman or in an underrepresented gender group and work/study in the School of Computing and Communications (SCC). Everyone is welcome to join.

Research Software Network Talks Summer Term Calendar Entry: 9th June Plotting in Python, part 2

This is the second part of the introduction to Python course. Here you will learn about how to run the same tasks multiple times with loops; getting your code to run depending on the data with if statements; re-using code with functions and more.

Calendar Entry 23rd June Git 2: Sharing your development with others using Github This course will show you how to take your usage of Git and Github to the next level by harnessing the power of GitHub for collaboration. Have you ever been confused about how to start a Pull Request or how to fork a repository and merge your changes back?
Perhaps you know and want to gain confidence in doing so? This course will teach you how to collaborate using git, and give you an environment in which to practise. Get in touch with Robin Long if you have any questions.

QUENCH network webinar

Calendar Entry June 16th , 2 - 4pm

Connect with people from a wide range of disciplines, sectors and organisations interested in the links between the quality of urban environments, nature connectedness, and health outcomes. The programme includes:

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 Updates from and discussion with the five funded QUENCH projects
 Helen Chatterjee, Arts and Humanities Research Council (AHRC),
 on the AHRC's health disparities research programme, including
 QUENCH-related projects already funded and connections to current
 and future funding opportunities
 Dave Bell, Natural England, on their work and future plans around
 the QUENCH agenda, including possibilities for supporting related
 projects
- Opportunities to connect and network with other participants

Attendance is free. You need to register in advance at https://www.eventbrite.com/e/quench-network-webinar-registration-337166793957.

Software in Practice Calendar Entry: June 22nd – Leeds Details of how to book via Eventbrite are <u>here</u> Following last year's online event, we have decided that 2022 is the year to bring SPA back in face-to-face format, so we will be running a one day event this year, full of sessions on modern software development topics, in the best SPA tradition. The conference will be a single track event, presented by a group of expert and engaging speakers, on 22nd June 2022, at the <u>St George's Centre</u> in the <u>heart of Leeds</u>. The event starts at 10:30 and will run until about 18:30, including lunchtime and breaks.

Building Workflows in Digital Health Calendar Entry: 29th June 10am – 5pm More details <u>here</u>

Orchestration Workflows are widely used in computational data analysis, enabling innovation and decision-making. Often the analysis components are numerous, and written by third parties, without an eye on interoperability. In addition, many competing workflow systems exist, potentially limiting portability of workflows written for any one specific workflow system. This hinders the transfer of workflows between different systems and projects, limiting their re-usability. The Common Workflow Language (CWL) project (https://www.commonwl.org/ was established in order to produce free and open standards for describing command-line tool-based workflows. The CWL language is declarative and provides a focused set of common abstractions enabling the expression of computational workflows constructed from diverse software tools. Explicit declaration of requirements for runtime environments and software containers enables portability and reuse. Workflows written according to the CWL standards are a reusable description of that analysis, runnable on a diverse set of computing environments.

Reimagining Landscape: Environment Communication and the Humanities

Calendar Entry: Thurs 7th July 2022, 9:00 to Fri 8th July 2022, 5:00pm

Venue: Lancaster University

Registration required: Conference booking is through the <u>University</u> <u>Online Store</u>

Ticket price: £35.00 - Standard ticket (including lunches, refreshments); £00.00 - Students/unwaged ticket – (including lunches, refreshments) Early bookers will receive a free ticket for our evening concert with Propeller and Mark Cocker, Flight//In Conversation. Book now

The <u>Reimagining Landscape Conference</u> is called to help us reconfigure our relationships with the natural world. At this time of unprecedented change, our keynote speakers and panel discussions will open dialogue towards new ways in which literature and the arts can disseminate environmental issues and foster engagement amongst the wider community.

Speakers and panellists include ecologists, land managers, farmers, writers, artists, photographers and musicians. The conference is a step towards establishing a new centre for environmental communication at lancaster.

Keynote speakers include:

- Fred Pearce, environmental journalist and author of A Trillion Trees (Granta, 2021) and The New Wild (Icon Books, 2015)
- Rebecca Chesney, visual artist
- Six panels over two days engage with coastal communities and sea level rise, the cultural landscape in the Anthropocene, light, species mapping and restoration, landscape access, arts access, writing the North of England and more.

Special event: Thursday 7th July, 8pm. Nuffield Theatre

The conference includes the premiere of Flight // In Conversation, an evening of conversation and music presented in a partnership between Lancaster Arts and The Future Places Centre, which explores connections between birds, soundscape ecology and us.

Propellor director Jack McNeill (clarinets and live processing) will be joined at the conference by one of the UK's leading authors on nature, Mark Cocker, alongside a handful of players and guests from the podcast series, Flight. Propellor are developing a full live ensemble show cocommissioned by Brewery Arts which will premiere in October 2022. Flight // In Conversation is the first outing of this material in a live setting, a collaboration between Propellor, Mark Cocker and electronic pioneer Leafoutter John.

"An ensemble who cross the worlds of folk, classical, electronic and experimental music. It twists and turns through different sound worlds. An intriguing project." Aidan O'Rourke (LAU)

Please contact Louise Bush at $\underline{\mathsf{fpcconference@lancaster.ac.uk}}$ with any enquiries

Reminders

STOR-i Workshop on Prediction and Optimisation (POP2022)
Calendar Entry: 16th-17th June, 2022 - Lancaster University, UK (Hybrid)
URL: https://stori-pop.lp151.com/

Registration deadline: 6th May 2022 Lancaster staff and PhD students can attend the workshop for free. Just drop us a line at stori-pop@lancaster.ac.uk by Friday 6th of May to let us know that you plan to attend.

Conference on Environmental Data Science and associated ECR day Calendar Entry: 4th -7th July 2022 More information can be found here

NIHR Funding Opportunities

Policy Research Programme - Evaluation of the Start for Life Programme: improving outcomes in the 1,001 critical days – deadline 14th June Policy Research Programme – Evaluation of RECONNECT service adult prison leavers - deadline 14th June Policy Research Programme – Evaluation of the Care and Support Specialised Housing (CASSH) Fund – deadline 14th June
Policy Research Programme – Ethnic minority communities' experience of accessing bereavement support services - deadline 14th June Policy Research Programme - Working Age Health call 4 - deadline 14th June Policy Research Programme - Navigation of Trade Challenge at the World <u>Trade Organisation for Public Health Policies</u> – deadline 14th June Policy Research Programme - Evaluation of Government Health Incentives Scheme - deadline 14th June Policy Research Programme - Understanding the impact of alcohol calorie labelling on alcohol and calorie consumption – deadline 14th June Policy Research Programme - Detecting abuse in residential settings for people with learning disability and/or autism - deadline 14th June Policy Research Programme - Complete Care Community Programme deadline 14th June Policy Research Programme - Post Implementation Review of the Health

Reminders

NERC: Exploring the frontiers of environmental science research 2022
Deadline: 14th June
Full details here

ERSC: Improve equality, diversity and inclusion in UK modern slavery research
Deadline 16th June

Deadline 16^{u1} June Full details <u>here</u>

NERC: Pushing the frontiers of environmental science research: July 2022
Deadline 19th July
Full details here

NIHR Health Inequalities in Overprescribing
Deadline: 22nd September
Full details here

and Care Act 2022 - deadline 14th June

Calls For Papers You May Have Missed

Security, Cyber Warfare, Wireless Networks, Mobile Computing July 25-28, 2022; Las Vegas, USA Deadline (EXTENDED): June 9, 2022

ICWN is an international conference that serves researchers, scholars, professionals, students, and academicians who are looking to both foster working relationships and gain access to the latest research results. It is being held jointly (same location and dates) with a number of other research conferences; namely, The 2022 World Congress in Computer Science, Computer Engineering, and Applied Computing (CSCE'22).

Full details and submission deadlines can be found here

Reminders

4th IMA Conference on the Mathematical Challenges of Big Data - Hybrid 19th - 20th September 2022
University of Oxford, hybrid #IMABigData2022
Full details can be found here

Current Opportunities

Senior Research Associate in Statistical Machine Learning, Mathematics & Statistics

Closing Date: Monday 30th May 2022

Full details are here

Applications are invited for a Senior Research Associate in Statistical Machine Learning to join the research programme in *Probabilistic Algorithms for Scalable and Computable Approaches to Learning* (PASCAL). This is an exciting opportunity to develop cutting-edge and theoretically-supported scalable Bayesian inference methods which are fit-for-purpose for modelling and analysing complex data structures, including large-scale spatio-temporal and network data.

APPG for Diversity and Inclusion in STEM, are currently inviting submissions. This is part of a new project for the group we are looking for a data consultant or agency to undertake mapping work of STEM skills in the UK. The RfP closes at 9.00am Monday 30 May 2022. Full details can be found here

Contact Abigail Hilditch Policy Partnerships Manager if you are interested.

School of Computing Science at Glasgow - Software Engineering Full details are here

The University of Glasgow is seeking applicants for the post of Lecturer/Senior Lecturer/Reader in Software Engineering within the School of Computing Science (2 posts available). These positions are equivalent to Assistant or Associate Professor, respectively.

The detailed specification is available on the University of Glasgow's

recruitment website (Please search for reference: 084589)

Reminders

Senior Research Associate, School of Computing and Communications Closing Date: Friday 15th July 2022

Vacancy details here

The NIHR School for Public Health Research

The NIHR have now launched their fellowships competition, which offers a flexible opportunity to start either a pre-doctoral or post-doctoral fellowship on a full-time or part-time basis.

Full details can be found here

Closing date for applications to both schemes is 12 noon Monday 27th June 2022.

Graduate School for the Environment

Apply for a funded PhD position
We offer a range of PhDs funded by different sources, such as research councils, industries or charities. As a PhD student, you will become a valued member of a research group. Here you will work with internationally respected academics, post-doctoral research associates and technicians.