UKCRCEC/2019/22



Minutes of the 52nd meeting of the UK Computing Research Executive Committee on Tuesday 29 October 2019 at 11:00 at BCS, The Chartered Institute for IT, 25 Copthall Avenue, London, EC2R 7DN

PRESENT

Cliff Jones m.c. schraefel Jie Xu

BY INVITATION

Edmund Robinson (CPHC) Samantha Francis (EPSRC) Rhys Perry (EPSRC)
Jessica Bonham (EPSRC) Andrew Rylah (IET) Bill Mitchell (BCS)

#Joined by teleconference

IN ATTENDANCE

Maxine Leslie (BCS)

APOLOGIES

Derek McAuley David De Roure David Hutchison Luc Moreau James Davenport/Tom Crick Ahmed Kotb

(BCS Academy)

1. WELCOME AND APOLOGIES FOR ABSENCE

The Chair welcomed the meeting participants and apologies for absence were received as above. A Rylah was attending the Executive Committee meeting for the first time and explained to Members that he was the Programme and Operations Manager at the IET with a wide remit. S Francis had been promoted within the EPSRC and J Bonham was taking over some of her current responsibilities including the December workshop.

2. MINUTES OF THE LAST MEETING

The minutes of the meeting held on Tuesday 4 June 2019 were APPROVED and are now ready for transfer to the UKCRC website.

ACTION: Secretariat/A Rylah

3. MATTERS ARISING

UKCRCEC meeting held on 4 June 2019

<u>Item 5.1: Consultations and submissions</u> – for the UKCRC/BCS joint response procedure, B Mitchell reported that he had been meeting with the Parliamentary Office of Science and Technology with a view to building links. Although he had not yet spoken to C Johnson, both were keen to nurture champions for Select Committee liaison and work together to coordinate strong messages.

ACTION: C Johnson/B Mitchell

4. CHAIR'S REPORT

RECEIVED and NOTED the report. For the Royal Society new sectional committee and nominations, the small working group that considers potential nominees for RS Fellowship through Section Committee SC0 and passes the list to Steve Furber in early July, is now a

regular part of the work of UKCRC and Members were asked to consider volunteering to chair the working group next year.

ACTION: Members

It would be a good strategy for UKCRC to recruit more industrial members, especially with the increase in labs in the UK. Members discussed possible companies that could be approached for nominations including:

IBM, Bloomberg, BT (J Bonham volunteered to look into), Offshoots of Google, Amazon, Arm, Lloyds Register (particularly the data science side), Toshiba, Samsung, Huawei.

The Chair undertook to circulate this list to Executive Committee Members to decide on who to approach, ensuring there are no duplicates and inviting contacts to the December workshop.

ACTION: Chair

The report from the September workshop is currently being finalised with the help of S Francis and C Johnson and the Chair asked for volunteers for the December workshop organising committee.

ACTION: Members

The workshop was timed to coincide with the UKCRC AGM and it was hoped that the meeting would be more energised with a physical presence. Possible agenda items and the practical arrangements for the day were discussed including the use of Microsoft Teams and Slack (for suggestions of topics to discuss). It was suggested that a dry run with the technology could improve the running of the meeting. If suggestions were to be made during the meeting, it would be important to appoint someone to monitor the chat function and the Slack Channel). Members were asked to volunteer. **ACTION: Members**

In relation to the REF rules issue on the classifications, it was reported that the statement of clarification on the UoA 11 Unit descriptor and taxonomy was now up on the <u>UKCRC</u> <u>website</u> and this provided much greater clarification.

The Chair had met with new UKCRC Executive Committee Member, David Hutchison (Lancaster) and discussed UKCRC membership for industrialists and landscaping/gap analysis for consultations in areas that current Members do not have expertise. It would be helpful for either BCS or the IET to maintain a database of this. B Mitchell indicated that BCS now uses Salesforce as customer relationship software and undertook to check out with internal colleagues how this could work. It would help with demonstrating that evidence is being gathered from specific experts.

ACTION: M Leslie/B Mitchell

C Johnson indicated that there was a page on the gov.uk website which defines subject areas and in addition, Martyn Thomas is really helpful in flagging consultations beyond the government website. It would be good to focus on a wider range of subject areas. B Mitchell agreed, saying that Select Committee Chairs are interested in seeing broader representation across those giving evidence. It was noted that in recruiting members, UKCRC does not specify any particular obligation to contribute to consultations and we do not approach people about this after they join. It would be good to highlight the importance of contributing to the community by (for example) talking to EPSRC or attending workshops and J Hillston and A Blandford undertook to liaise with Kevin Jones (as Membership Panel Chair) on a statement to reflect this, both on the website and during the recruitment process.

ACTION: Chair/A Blandford

4.1 Website report

RECEIVED and NOTED the paper. Following L Moreau's meetings with the Chair and with IET representatives, comments were invited from the Executive Committee. All agreed that a refreshed design for the website was necessary. Although it would not be possible to publish information about consultations on the website prior to reports

being published, it is important to make it clear to visitors what UKCRC does and what it is planning to do in the future.

In terms of the specific questions posed in the paper: the mission statement is not obvious but is listed at www.ukcrc.org.uk/about/index.cfm (Mission and Strategy for UKCRC). The statement has not been reviewed for some time and therefore needs updating. Of the four audiences, the first three are relevant for the UKCRC website: the computing community, government/decision makers and UKCRC members. UKCRC does not have an image bank but it would be good to include more images, such as those taken at workshops (with participants' consent). Members liked the idea of a draft questionnaire for UKCRC Executive Committee Members (including observers) with questions such as: tell us about your professional journey; what is the research achievement you are most proud of?; which research has been the most influential on you?; what is your role at UKCRC? It would also be good to have varied profiles of members with different careers, provided that profiles were consistently edited and not too wordy. A Rylah undertook to liaise with A Kotb on this.

ACTION: A Rylah

For the question of whether there is any critical material that is missing on the UKCRC website, this could include pointers to workshops, consultations titles (although no details of consultations with unpublished reports as noted above). It was suggested that IET colleagues could be included in the UKCRC Member JISCMail list, so that they can have sight of consultations and arrange for titles to be posted on the website as a result. M Leslie undertook to follow up on this and also to send these notes to L Moreau.

ACTION: M Leslie

The posting of draft minutes on the website was also discussed, as currently only the minutes that have been approved are posted. Members AGREED that the draft minutes should also be posted (in the secure area or public area) following sign off by the Chair.

ACTION: M Leslie

5. CONSULTATIONS & SUBMISSIONS

RECEIVED and NOTED the report. C Johnson reported that there were still some reservations about the CPHC proposal. Although the situation has improved in the last 18 months, it would be important to involve more people in the consultation and submissions process to share the load and fill the gaps in expertise (eg, healthcare). Additionally a range of respondents would help the perception of UKCRC as a community, which is proactive rather than reactive, helping to set the agenda. It would be good to have a list of UKCRC Members with particular interests that can help with specific consultations.

Members liked the idea of a working group that was diverse and involved the wider community, not just the Executive Committee. These discussions would be continued during the joint UKCRC/CPHC meeting (see below).

6. RESEARCH FUNDING AND POLICY

6.1 EPSRC Update [Samantha Francis/Rhys Perry/Jessica Bonham]

RECEIVED and NOTED the paper. As there were further items to report since the paper was circulated, R Perry undertook to provide an updated version for circulation to the UKCRC membership [action complete – see <u>below</u>].

Feedback was invited from Members on the Fellowships and it was suggested that effort be put into getting opinions from those that have been through the system.

6.2 UKCRC/EPSRC Workshop 'A Vision for UK Computing Research' update [J Hillston/C Johnson/S Francis]

RECEIVED and NOTED the paper which was still in draft format but will be finalised and released along with the call for participation in the December workshop.

7. REPORTS

7.1 Membership Panel

See Chair's report above.

7.2 Open Publishing Working Group

RECEIVED and NOTED the report by Edwin Hancock, Chair of the UKCRC Computer Science Publication Working Group. C Jones indicated that the Working Group would appreciate feedback on the SWOT analysis. Once feedback from the Executive Committee is collated, the plan is to circulate this to the whole UKCRC membership (with the names redacted).

ACTION: Members

The Chair suggested that the Working Group liaise with Peter Buneman who holds curated medical databases. Thanks to Edwin were recorded for taking on this work and the Chair undertook to invite him to the December workshop to talk about this work.

ACTION: Chair

- **7.3** International Matters nothing to report.
- **7.4 CPHC [Edmund Robinson verbal]** nothing to report but see joint meeting notes <u>below</u>.

7.5 BCS Academy [Bill Mitchell]

RECEIVED and NOTED the report. The NCCE targets set by DfE (Key Performance Indicators for teacher certification, Computing Hub recruitment etc) are challenging and the minister is taking an active interest. A major survey is being tested with BCS Members including workshops with representatives from devolved nations. Consultation responses can consequently be expedited as positions and evidence is prepared in advance. This appears to be much appreciated by Select Committees.

BCS Policy has just published a report on 'Scaling up the ethical AI MSc pipeline' in liaison with a number of stakeholders including the Office for Students which is on the website. A Blandford indicated that Mozilla organised a recent teaching event, hosted at UCL, about help with computing ethics and that she could put B Mitchell in contact with the organisers. BCS had underlined to the OfS that ethical issues need to be integrated within academic programmes, not just added on. It would be good to compare and publish good practice in this area and RAEng could be interested in participating in such discussions. Although NCCE work related to England only, the resources are available to all.

7.6 **IET** [Andrew Rylah – verbal]

The IET is the lead partner in the consortium that won the bid funded by the DCMS to establish a new independent UK Cyber Security Council (UKCSC) to act as an umbrella body for existing professional organisations and drive progress against the key challenges the profession faces. The IET is starting to set up the processes to support this and appointing staff with the aim of achieving Royal Charter status by 2020. There are nine workstreams around professional development in cybersecurity

to map pathways within the profession, including communications and qualifications and the IET is looking for volunteers to participate in Boards and Working Groups. Further information may be found here.

A series of videos are being produced around digital technology. Members with any suggestions about digital tech areas to be the subject of this series, for a general public audience, are invited to contact A Rylah. [Post meeting note: further information on IET activities has been circulated to the UKCRC Executive Committee & Membership]

8. Election of New Executive Committee Chair

[J Hillston left the room for this item]

Members considered and APPROVED the election of J Hillston as Chair of the Executive Committee and the full UKCRC.

9. ANY OTHER BUSINESS

It was suggested that the UKCRC website could include video links and a feed on news updates (rather than just links on the homepage). Clearer links with EPSRC would also be good, especially as people are often interested in cross-disciplinary information. Communications and digests could help here and the IET Inspec resource (URL above) contained a massive database of articles.

The Chair thanked Members and closed the meeting at 12:58.

10. DATE OF NEXT MEETING AND ANNUAL GENERAL MEETING 2019

The next EC meeting will be held at BCS London on Tuesday 10 March at IET offices. The AGM will be a virtual meeting to be held on Friday 6 December at 14:00.

ANNUAL GENERAL MEETING FOR 2019

Friday 6 December at 14:00 - virtual meeting

COMMITTEE MEETINGS FOR 2020 Commencing 11:00 unless otherwise stated Tuesday 10 March – IET Offices, London
*Tuesday 30 June – BCS Offices, London
Tuesday 27 October – IET Offices, London

ANNUAL GENERAL MEETING FOR 2020

Friday 4 December at 14:00 – virtual meeting

*Co-located with the CPHC Committee meeting to be held in the afternoon. Opportunities to network will be available over lunch at 1pm.

NB: BCS and IET rooms subject to availability

UKCRC-CPHC COLLABORATIVE WORKING (CPHC Committee Members were in attendance for this item)

1. Establishing a joint consultation-response panel

Members RECEIVED the papers for this topic and agreed that it was a positive move to speak with one voice on consultations where appropriate and where both organisations have the same view. C Johnson indicated that consultations ask very specific questions and UKCRC Members did not always respond to the questions, but aired wider concerns. Although it was important to have a dialogue, any responses must be specific to the questions asked. It will continue to be important for editorial control to sit with one person for any one consultation, possibly in rotation. Members from both Committees AGREED to proceed with this work.

ACTION: CPHC/UKCRC Chairs

2. Scoping a "master class" or "engagement forum" to upskill CS experts to provide evidence to governmental committees and enquiries

The CPHC Chair had an earlier meeting with the Director of CaSE, Sarah Main who had indicated her willingness to attend a workshop to help with upskilling members on how to provide evidence in government forums. S Francis agreed that it is important for individuals to help in informing policy and presenting robust evidence and such skills were currently being looked at, in particular for Fellows. She would be happy to provide speakers for such a workshop. S Fincher undertook to scope the proposal in liaison with J Hillston, who flagged that David Hutchison (Lancaster) might also be interested in getting involved.

ACTION: CPHC Chair/UKCRC Chair

3. Ethics

The UKCRC Chair explained that at the joint EPSRC/UKCRC workshop in September, the issue of ethics was raised, both in terms of curriculum and ethical approval for research work. There had been a shift from people-focus to data-focus and some HEIs had brought in philosophers to deliver this area of the curriculum.

There is scope for a possible workshop to consider how to address this issue including supporting policy/foundational work between organisations to understand the curriculum and how ethics can be integrated within every course. Best practice could be provided in a booklet similar to those produced following CPHC workshops. K Miller indicated that through accreditation visits, it had been noted that different HEIs have different approaches to teaching ethics, some integrated throughout the curriculum, some in specific modules and some in a combination of both and it would be important to avoid any prescription.

A Blandford informed Members that Mozilla had hosted an event at UCL running a responsible Computer Science challenge based around teaching.

It was suggested that an Ethics Workshop could be delivered in spring 2020, maybe during the CPHC Conference. The involvement of the IoC was also suggested, as they could be keen to support this via particular HEIs. It will be important to define the purpose of such a workshop. R Aspin suggested that the focus could be how to adapt to the evolving ethical landscape and that large spaces are available around the Conference space which would work well.

R Aspin, K Miller and M Petridis were interested in being involved, but not leading on this. It was AGREED that the Conference WG would work with the UKCRC Executive Committee to scope this for the next CPHC Committee meeting.

ACTION: Conference WG

ACTION: Members

4. Any Other Business

The UKCRC Chair reported that the EPSRC/UKCRC workshop in September will be followed by a second event on 6 December to identify the direction of travel for the community especially the support needed and the areas of research that need activity. 45 people had attended the September event including a number of early career researchers and the key themes had been ethics, responsible research, working with industry, losing staff to industry, trustworthiness and AI. A report will be published to coincide with the call for the December workshop.

The CPHC Chair thanked all participants and closed the joint meeting.

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EPSRC Update – October 2019

EPSRC Executive Chair University Engagement

In early September EPSRC organised a series of Town Meetings across the UK; in Bristol, Sheffield, Edinburgh and London. The agenda featured a talk from EPSRC Executive Chair, Lynn Gladden, on EPSRC within UKRI, the new EPSRC Delivery Plan and cross-Council engagement. The outputs from the events can be found on EPSRC's website.

Lynn Gladden and the Deputy Executive Chairs will also be visiting EPSRC Framework and Strategic Partner universities between October and February.

SETB Recruitment

The Science, Engineering and Technology Board (SETB) was announced as part of the Delivery Plan launch on 10th June 2019. Recruitment for the board is now open and will close on 29 November 2019.

The role of the board is to use scientific and technological insight to identify and champion bold new research challenges at the cutting edge of engineering and physical sciences for future investment.

EPSRC are looking to recruit up to 10 members in this exercise, who possess a range of expertise and experience in research and innovation across EPSRC's stakeholder groups, reflecting a diverse mix of characteristics and backgrounds. The new members will start on the 1st April 2020.

EPSRC Scheme Updates

- Fellowships Some clarifications to the guidance and changes to the process for the existing fellowship scheme have been published on our website. The changes have been made in order to make the assessment process at the interview stage more robust, including ensuring that the quality of science is not re-reviewed. Changes include:
 - The person specification has been removed and replaced with a statement setting out the expected aims and outcomes of the fellowship for each career stage.
 - The assessment criteria have been separated with 5 covered at the prioritisation panel and 4 at the interview stage.
 - At the interview stage, there will be separate, tensioned rank-ordered lists for each career stage.

• Programme Grants:

- Clarification of the programme grant scheme through information and guidance on the EPSRC website will be provided, with publication of questions for discussion at the pre-outline stage on the EPSRC website.
- An external outline panel will replace an internal sift panel at the outline stage and the full proposal assessment criteria will be reduced in number and will be aligned with standard assessment criteria.
- These improvements will be implemented by April 2020 and are designed to ensure the scheme is consistent with other EPSRC funding opportunities. No changes have been made to the purpose, scope and ethos of the scheme. EPSRC will be monitoring the improvements to ensure no unintended consequences are caused.

Cross-Disciplinarity and Co-creation

The ICT Theme at EPSRC have recently published additional resources as guidance on how to write a proposal aligned to our <u>cross-disciplinarity and co-creation</u> cross-ICT priority, following on from a workshop held earlier this year.

AI and Robotics

We would like to introduce the AI and Robotics team in EPSRC which was formed earlier this year in response to the rising profile of AI and robotics. This team, led by Anna Angus-Smyth, works extremely closely with colleagues in the ICT, Mathematical Sciences, Engineering and Digital Economy teams, and aims to maximise the opportunity of the high profile of AI and robotics for the research community.

The team has spent much of 2019 working on the UKRI AI Review in partnership with colleagues across UKRI. The outcomes of this review will be published in early 2020, and will set the direction for UKRI's approach to supporting AI research and innovation going forward. Beyond this the team have been working on a number of other activities, most notably new investments in Turing AI Fellowships and Trustworthy Autonomous Systems:

- Trustworthy Autonomous Systems Hub EPSRC has launched a call for outline proposals for a coordination Hub for the UKRI Trustworthy Autonomous Systems programme. Up to £11.7 million is available to support one Hub for up to four years, starting from 1 June 2020. The application deadline is 12th December 2019. A second call is planned for research nodes connected to the hub, which will be launched in December 2019.
 - This programme is an example of a submission to the EPSRC <u>Big Ideas</u> initiative which has developed into a funding opportunity for the research community.
- EPSRC, on behalf of UKRI, is delivering the second phase of the Turing AI Fellowships, consisting of two separate programmes:
 - <u>Turing Al World-Leading Researcher Fellowships</u> Call opens mid-November, deadline for outlines will be 2 April 2020.
 - Turing Al Acceleration Fellowships Call now open, deadline for outlines is 18 February 2020.

Whilst the team have been very busy to date, they are very keen to talk to a broader set of colleagues in the community in the coming months, and to understand more about AI and robotics research activities across the UK. Key contacts have been included below, please do get in touch! Anna Angus-Smyth, Head of AI & Robotics: anna.angus-smyth@epsrc.ukri.org General Inbox for Queries: AI.Robotics@epsrc.ukri.org

ISCF Digital Security by Design Challenge

The Industrial Strategy Challenge Fund (ISCF) <u>Digital Security by Design</u> challenge is executing a mission to increase the protection of software in the light of increased cyber-attack against various class of software vulnerabilities, through additional hardware protection capabilities architected around the containment of pointers, and the privilege by which regions of fine grain data can be accessed.

EPSRC has launched a <u>call</u> for research projects that address specific objectives within the scope of the challenge, with up to £8 million available to support 6 – 9 projects. The deadline for proposals is 7th January 2020.

Following the Collaborators' Workshop held on 26th Sept, UKRI are running a <u>Collaboration</u> <u>Development workshop</u> on 22nd November 2019 in London to facilitate academia-industry and academia-academia collaboration for this call.

Other UKRI Funding Schemes:

- UKRI Public Engagement Update UKRI has published its <u>vision</u> for how it will promote world-leading research and innovation that is built on the knowledge and values of society and open to people from all backgrounds. Funding calls have been released, including:
 - <u>Citizen Science Exploration Grant</u>, a new £400,000 funding call to encourage researchers and innovators to experiment with citizen science. Application window: 01 October 2019, 00:00 – 12 November 2019, 16:00.
- FLF Communications & Updates Round 2 of the UKRI Future Leaders Fellowships (FLF) have been announced, with 78 fellows funded giving a 19% success rate. Details can be found on the UKRI FLF webpages.

EPSRC Investment Timeline:

Following feedback from the community with regards to short deadlines, EPSRC has launched an Investment Timeline on the website as a high-level, interactive view of upcoming investment opportunities across EPSRC and UKRI. It is not a comprehensive view of all opportunities but is designed to provide early notice of both UKRI-led calls and EPSRC-led calls to help researchers with their grant submission planning.

Rhys Perry, EPSRC Portfolio Manager, ICT Theme; rhys.perry@epsrc.ukri.org



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