

Administration by BCS

First Floor, Block D, North Star House, North Star Avenue, Swindon SN2 1FA

COUNCIL OF PROFESSORS AND HEADS OF COMPUTING

Minutes of the Committee meeting of the Council of Professors and Heads of Computing held on **Tuesday 29 October 2019** at BCS, 25 Copthall Avenue, London EC2R 7DN

PRESENT

Sally Fincher (Chair)	Edmund Robinson	Ray Farmer
Ian Allison	Miltos Petridis	Siobhan Devlin
Liam Maguire	Carsten Maple	Atif Waraich
Mark Griffiths	Keith Miller	Rob Aspin
m.c. schraefel (UKCRC)	Samantha Francis (EPSRC)	*Rhys Perry (EPSRC)
*Jessica Bonham (EPSRC)		

*from item 5.10 only

IN ATTENDANCE (Secretariat)

Maxine Leslie (BCS)

APOLOGIES

Alastair Irons	Nick Savage	Carron Shankland
James Davenport/Tom Crick (BCS Academy)		

CPHC-UKCRC COLLABORATIVE WORKING (UKCRC Executive 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 student 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. R Aspin indicated that avatar ownership is important in his own HEI with evolving ethical platforms.

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

Members interested in getting involved to contact the 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.

UKCRC EC members left the meeting at this point.

CPHC Committee meeting

1. WELCOME AND APOLOGIES FOR ABSENCE

Apologies for absence were received as above.

2. MINUTES OF LAST MEETING (CPHC/2019/17)

The minutes of the last meeting held on Monday 1 July 2019 were accepted as a true record.

3. MATTERS ARISING FROM PREVIOUS MINUTES

1 July 2019

Matters Arising (13 May 19; item 3): In relation to the action to set up meeting to discuss an EDI workshop follow up to the Napier report (Carron Shankland, IoC, ACB and interested CPHC Committee members). It was agreed that this would be deferred to the next meeting with C Shankland in attendance. *[post meeting note: C Maple has written to C Shankland to offer help]*

For liaison with the IoC, it had been agreed that R Farmer would keep a watching brief and report back anything of interest to the Committee. The Chair undertook to speak to J Davenport to check whether anything major has changed. **ACTION: Chair**

Regular reports: IoC (item 5.10): For contact with the Cambridge academic who provided data analysis for Augar, E Robinson reported that this is still outstanding, asking Members if there was any specific information that was needed and it was agreed that a watching brief would be useful. It was highlighted that the government was putting money into digital skills, for instance upskilling graduates from non-computing degrees to enter the digital sector, which ensures employability and benefits the economy.

13 May 2019

Regular reports: Welsh HoS (item 5.8): M Griffiths reported that in Wales, the environment felt isolated from England due to the devolved funding. It will be useful for CPHC to act as a mechanism to be linked in via other ways to shape the agenda in Wales.

Programme of work (item 8.1): K Miller indicated that he would send around a template for CPHC Officer roles as part of the action to set up a process/operating note to sound out potential CPHC officers in advance of appointment. **ACTION: K Miller**

4. EPSRC Update [verbal]

See [EPSRC Briefing for CPHC](#) appended to these minutes. The UKRI brand has been updated.

5. REGULAR REPORTS

5.1 Chair's Communications – nothing to report

5.2 Treasurer's Report [R Farmer] – nothing to report

5.3 Learning Development Group Report [I Allison/S Devlin] – RECEIVED and NOTED the paper.

5.4 Secretary's Report [K Miller]

K Miller reported that the quorum change within the constitution has now been approved. 82 votes had been cast and this met the existing quorum rules of more than 10% of the membership. The outcome is that 96% are in favour of the quorum change. The Secretariat will update the constitution, and include this on the website. *[Action complete]*

In terms of the role shadowing idea, K Miller will circulate information to Committee Members, who are asked to respond privately or be approached directly.

ACTION: Members

5.5 UKCRC Report [E Robinson]

In addition to the EPSRC report, it was reported that 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. CPHC supports this initiative and. Further details are at <https://www.theiet.org/impact-society/uk-cyber-security-council-formation-project/> *[post meeting note: information has been circulated to CPHC Members by C Maple]*

E Robinson also reported that the issue about the subject breakdown in REF had been resolved, communication on which had been circulated earlier to CPHC Members ([Clarification Note on UoA11 use of Taxonomy](#))

5.6 EPC Report [S Fincher/J Yip]

The Chair reported that EPC had not met since the last meeting and that Jim Yip was standing down from EPC and would no longer act as an observer to CPHC Committee. Stephanie Haywood had been suggested as a replacement and the Secretariat undertook to make contact about this.

ACTION: M Leslie

5.7 Welsh HoS [M Griffiths]

There was a major report on economic transformation for work – digital innovation from the Welsh government related to areas such as robotics and automation and how these would effect business over the next 10 to 20 years. The report suggests six innovation clusters, with a lead body and a transformation roadmap. The clusters include cyber security, services, biotechnology and clean energy with a budget of £100M.

5.8 NI HoS [L Maguire]

Ulster University and Queen's University Belfast were working on Artificial Intelligence and data analytics engagement with Turing. It will be crucial to build a pipeline of undergraduates and the government was also keen to see this, in particular as recruits to the sector are not coming through, a number moving to work in the Republic of Ireland, even though salaries are competitive. L Maguire undertook to think how CPHC could help or offer support.

5.9 Scottish HoS

I Allison reported that SICSA (the research pool for Computer Science in Scotland) has a new lead called Aaron Quigley.

ACTION: devolved nation representatives to consider how CPHC can support them

5.10 Reports from Other Organisations & Activities

IE inc Conference report from 9 July (CM/KM)/PICTFOR (MP): RECEIVED and NOTED the report, notes and associated papers. C Maple reported that discussions included the various systems for ensuring the quality of conferences. CPHC-equivalent organisations were looked at including measurement of quality. C Maple had spoken about the REF, which other countries did not use, focussing on recognition of the contribution of individuals rather than assessing groups.

Distinguished dissertations (IP – not on Committee); IoC (JHD): the DisDis report was RECEIVED and NOTED.

BCS Academy (R Farmer): the report was RECEIVED and NOTED.

6. SUBSCRIPTION UPDATE

RECEIVED and NOTED the report.

m.c. schraefel left the meeting at this point

7. CaSE's five point plan to boost science and engineering

As mentioned earlier, the Chair had met the CaSE Director, Sarah Main before the meeting and had discussed the publicising of CaSE's [five point plan to boost science and engineering](#). The approach is very broad brush but CaSE is interested in involving CPHC, in particular as now is a good time to have new ideas considered. Key considerations are to ensure any idea has a name and that ministers are interested in our area. CPHC was urged to keep communication channels open and CaSE in mind.

[main items of business]

8. PROGRAMME of WORK

8.1 2020 Conference

R Aspin and R Farmer had agreed the initial budget proposed for the Conference to be held in Salford on 22/23 April 2020. The budget is based on the lowest number of delegates (70) with a £3K contribution from CPHC.

R Aspin talked through the [conference facilities at Salford](#) and the choice of [evening meal venue](#) for Day 1, which was about 200m away from the conference venue. Both were located in MediaCity. Preferential rates were being negotiated with the hotel nearest to the site and there were a number of hotels nearby.

Phil Swann, CIO for GMCA had been suggested as a speaker with Andy Burnham for the evening speech (but with back up in case of last minute unavailability). A sketch of the agenda would be available for the next meeting. **ACTION: Conference WG**

K Miller undertook to forward the invitation templates to R Aspin. **ACTION: K Miller**

All Members were happy with the conference location and evening venue.

8.2.1 Workshop Programme: LDG [S Devlin/I Allison]

I Allison reported that two workshop themes had been circulated to Members, one on the back of the North of 300 workshop series on the automation of assessment. The call had resulted in 11 ideas for projects from 9 member institutions and submissions were requested from each. There had been a good range of institutions including Southampton, Manchester, Chester and Abertay and the plan was for a workshop to be

held on Tuesday 3 December which Coventry University have agreed to host. The next action is to build purpose and intended outcomes.

S Devlin reported that the creativity and confidence workshop theme had arisen out of the Shadbolt Report recommendations and whether or not graduates have the confidence to seek appropriate employment. There were 9 responses to the call with 10-11 potential projects, either pedagogical or practical, some of which involve employers. A couple of dates before the end of the year are being considered with the aim of producing a booklet (similar to GECCO) to be presented at conference. The Chair offered her help in how to package this as a showcase. The call is technically closed but new approaches will not be turned away and it is likely that the community will be canvassed for interest.

8.2.2 Workshop Programme: Outreach Network [S Fincher]

All institutions are interested in outreach activities and do not compete in this area, but there is little awareness of what others do. The new CAS Co-ordinator had been in touch about forming a CAS/University partnership with a view to improving the offer. CPHC has CAS contact data as a result of the data collection exercise undertaken during subscription invoicing. The plan is to have two meetings involving four attendees, resulting in a report. Members AGREED the proposal and R Farmer agreed to the expenditure. Members interested in participating should contact the Chair. **ACTION: Members**

I Allison reported that there was also a primary engineer group which might be worth contacting. The Chair and I Allison would talk offline about this. Also, there are Smart STEMs in Scotland running 1 day activity/workshops to bring primary school girls into activities. This was currently focussed on Scotland, but it would be good to extend this.

ACTION: Chair/I Allison

8.3 Shadbolt 5 years on [data analysis/DHLE and beyond]

This item and others under the Workshop Programme heading were deferred to the next meeting as the key Members were not in attendance.

10. MEMBER COMMUNICATIONS – OCTOBER, NOVEMBER, DECEMBER

The following topics were AGREED for forthcoming updates to the Membership:

October - LDG (I Allison/S Devlin) ; K Miller announcement about constitution quorum
Nov – Conference (R Aspin)
Dec – Augar (E Robinson)

It would also be good to publicise the UKCRC workshops. M Leslie undertook to prompt the responsible CPHC Committee Members at the start of each month and talk to N Savage about website updates.

ACTION: M Leslie

11. ANY OTHER BUSINESS

It was noted that the protected area of the website had not been used since Vic Grout stood down from the Committee. It was AGREED that the circulation of Committee papers should continue by email as this was an easier way to access documentation. Members discussed the retention policy and M Leslie undertook to check usual practice within BCS and let the Committee know.

ACTION: M Leslie

Outstanding Actions from Committee Meetings – 29 October, 1 July 2019, 13 May 2019 & 4 February 2019

CPHC-UKCRC COLLABORATIVE WORKING				
Establishing a joint consultation-response panel	1	Proceed with work on establishing a response panel	CPHC/ UKCRC Chairs	On-going
Scoping a "master class" or "engagement forum"	2	Scope a proposal to upskill CS experts to provide evidence to governmental committees and enquiries	CPHC/ UKCRC Chairs	On-going
Ethics	3	Conference WG to work with the UKCRC Executive Committee to scope an Ethics Workshop to be delivered during the CPHC Conference for the next CPHC Committee meeting Contact Conference WG if interested in getting involved in the Ethics Workshop	CPHC Conference WG Committee Members	On-going
OUTSTANDING ACTIONS FROM COMMITTEE MEETING – 29 OCTOBER 2019				
MATTERS ARISING 1 July 2019 13 May 2019	3	Speak to J Davenport to check if anything major has changed in IoC's work	Chair	On-going
		Circulate a template for CPHC Officer roles in order to set up a process/operating note to sound out potential CPHC Officers in advance of appointment	K Miller	On-going
REGULAR REPORTS Secretary's Report EPC Report Devolved Nation Reports	5.4	Contact K Miller if interested in CPHC Officer role shadowing	Members	On-going
	5.6	Invite new EPC contact to observe future CPHC meetings	M Leslie	On-going
	5.7-5.9	Devolved nation representatives to consider how CPHC can support them	M Griffiths/ L Maguire/ C Shankland	On-going
PROGRAMME OF WORK 2020 Conference Outreach Network	8.1	Draft Conference agenda for next meeting Forward Conference templates to R Aspin	Conference WG K Miller	On-going
	8.2.2	Contact the Chair if interested in participating in the Outreach Network meetings Liaise on primary engineer group contact	Members Chair/ I Allison	On-going
MEMBER COMMUNICATIONS	10	Circulate updates to members using standard email template: August – Augar update (E Robinson) September – CPHC Conference to announce venue, speakers, non-speaker involvement (R Aspin)	M Leslie to remind at start of each month	On-going
ANY OTHER BUSINESS	11	Check BCS retention policy with a view to replicating it for CPHC data	M Leslie	On-going
OUTSTANDING ACTIONS FROM COMMITTEE MEETING – 1 JULY 2019				
MATTERS ARISING 13 May 2019 3 December 2018	3	Set up meeting in September to discuss EDI workshop follow up to Napier report (Caron Shankland, IoC, ACB and interested CPHC Committee members)	Chair	On-going
		Follow up with CPHC membership to encourage them to vote on constitutional issue (quorum)	Chair	On-going
		Liaise with Chair and Simon Thompson on how to run with the workshop materials	N Savage	On-going
REGULAR REPORTS IoC	5.10	Circulate latest version of where IoC has got with Shadbolt update Provide suggestions for improvements/purpose (JHD's current plan is to publish as an IoC technical report)	J Davenport Members	Complete On-going

		Investigate whether can make contact with Cambridge academic who provided data analysis for Augar	E Robinson	On-going
PROGRAMME OF WORK 2020 Conference Workshop Programme	8.1	Circulate the Conference dates to the Membership, asking for ideas about possible topics (eg, Wonkhe, UKRC, CaSE).	Chair	On-going
	8.2	Contact I Allison about taking forward his workshop proposal Talk to J Adamson (NCCE) about Outreach Network	Chair	On-going
ANY OTHER BUSINESS	11	Circulate meeting dates invitations via Outlook	Secretariat	On-going
OUTSTANDING ACTIONS FROM COMMITTEE MEETING – 13 MAY 2019				
MATTERS ARISING 3 December 2018	3	Draft a protocol for modes of Committee meeting attendance	Chair	On-going
SUBSCRIPTIONS UPDATE	7	Set up chasers for R Farmer to send for 18/19 and 17/18 and arrange to write off Winchester's 17/18 subscription	M Leslie/ R Farmer	Complete On-going
PROGRAMME OF WORK: Conference Workshop Programme update Outreach Network	8.1	Add process of sounding out potential CPHC Officers a year in advance of appointment into operating note	K Miller	On-going
	8.5	Check if the IET would be happy to share information on Robot Day event in Reading with CPHC	Chair	On-going
OUTSTANDING ACTIONS FROM COMMITTEE MEETING – 4 FEBRUARY 2019				
EPSRC Update	4	Circulate ED&I case studies to the Committee when available	R Perry	On-going

FUTURE MEETINGS

All located at BCS Offices, London and commencing at 11.00am, unless otherwise stated

COMMITTEE MEETINGS 2019	COMMITTEE MEETINGS 2020
Monday 9 December 2019	Monday 3 February 2020 Monday 11 May 2020 *Tuesday 30 June 2020 Monday 5 October 2020 Monday 7 December 2020
CONFERENCE DATE: Wednesday 22/Thursday 23 April 2020	

*To be co-located with UKCRC Executive Committee starting with lunch at 13:00

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 [cross-disciplinarity and co-creation](#) 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 [Big Ideas](#) 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:
 - [Turing AI World-Leading Researcher Fellowships](#) – Call opens mid-November, deadline for outlines will be 2 April 2020.
 - [Turing AI 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) [Digital Security by Design](#) 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 [call](#) 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 [Collaboration Development workshop](#) 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 [vision](#) 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:
 - [Citizen Science Exploration Grant](#), 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



**Engineering and
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