Department of Computing

Industrial Liaison Board

Monday 25th September 2017, 5.00pm Ballroom, 58 Princes Gate South Kensington Campus London SW7 2PG

Minutes

Attending: External: Alice Bentinck (Entrepreneur First), Holly Cummins (IBM), Pinar Emirdag (State Street), Bryan Lillie (Qinetiq), Bill Mitchell (BCS), Raymond Mulligan (Credit Suisse), Alexandros Papspyridis (Microsoft), David Sharpe (Ocado), Anna Shipman (Government Digital Service), Wendy Tan-White (BGF Ventures), Alison Whitney (National Cyber Security Centre), Sarah Wilkinson (CEO of NHS Digital). Internal: Dalal Alrajeh (Lecturer), Robert Chatley (Principal Teaching Fellow), Tony Field (Director of Studies: UG), Anandha Gopalan (Deputy Director of Industrial Liaison), William Knottenbelt (Director of Industrial Liaison), Alessio Lomuscio (Director of Strategy and Planning), Anne O'Neill (Department Operations Manager), Maia Pantic (Champion for Equality and Diversity), Peter Pietzuch (Director of Research), Daniel Rueckert (Head of Department), Fariba Sadri (Director of Studies: PG), Francesca Toni (Deputy Head of Department), Joseph Worsfold (Web and Communications Officer). Apologies: Tim Brennan (Amadeus), Nigel Fine (IET), Ben Glocker (Champion for Public Engagement), David Low (Amazon), Ioannis Papagiannis (Facebook), Johnny Watts (Frontier Developments), Rob Whitehead (Improbable), Sarah Wilkinson

Agenda items:

1. Welcome & Introduction by Daniel Rueckert (Head of Department)

Daniel thanked everyone for coming and introductions were made all round.

2. Minutes of the Last Meeting

(NHS Digital).

The minutes of the last meeting were provided prior to the current meeting and there were no comments made by participants.

3. Departmental Update by Daniel Rueckert

Daniel started by updating participants on the new space in ACE that the Department of Computing will be taking over. This new space will allow for an increase in PhD's and RA's as it is mainly for research purposes. There will also be a move to have access to more labs, not just computing labs, but ones that specialise in Robotics, IoT and more. There are clear limitations with what can be done with the space in South Kensington, so there may be some considerations for the use of White City.

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Daniel moved on to discuss the recent Departmental Away Day and the current strategy for teaching. The teaching very much benefits from the research on going in the department which we have started to represent in a different way. With 7 main themes from AI to Visual Computing and 2 themes spanning all of these: Security and Data Science.

Daniel then highlighted the new academic appointments in the department, all of whom add to or supplement the existing expertise in the department. Despite Brexit there hasn't been a noticeable impact on new hires, with them coming from overseas and Europe. A number of awards had also been given to Computing academics recently and you can see our news feed for more on those.

Members discussed student applications and how they have been steadily increasing over the past four years. Unfortunately there is a hard limit to the number of students that can be taken on by the department. This is almost entirely due to physical space – both accommodation and our biggest lecture theatres. The challenge then is to whittle down the large number of applications to the smaller intake of students. The department is currently testing a few methods to help with this problem including introduction of the GRE test for some courses.

There was then discussion regarding the number of female applicants and eventual intake in the department. It currently remains at approximately 10-14% which is the national average. A number of potential causes and solutions were proposed and there was general agreement that interventions should take place at any earlier age, to provide suitable female role models for aspiring female computer scientists.

In relation to the previous discussion Daniel announced the department's outreach work in partnership with Yoox Net-A-Porter which specifically encourages female participation. This is run with past alumni from the department at their company Turing Lab.

Also, the department is looking into building a web portal for Women in Computer Science. This could be used to facilitate networking, share job opportunities, assist with studies and more. In order to complete such a task the department would need support from industries.

4. Research Presentation: 'Forensic-ready by Construction Software Systems', by Dalal Alrajeh (Department of Computing)

For more information on Dalal's presentation, please see the slides of the presentation.

5. Open Discussion: Cyber Security & Teaching

Members discussed the advantages and disadvantages of the GCHQ accreditation and how this might affect the departments teaching and students. Wendy Tan-White highlighted that the Government seems to want more Cyber Security experts and Dalal Alrajeh concurred stating that current statistics put the shortage of Cyber Security experts at 1.5 million in the coming decades.

Bryan Lillie provided his own insight adding that graduates he had seen at interview and incredibly varied skills and experience from Cyber Security courses across the UK. He highlighted that Cyber Security as a subject areas doesn't have just one body (BCS, IET, GCHQ all exist in this space). But, Bryan highlighted the need for a 'bar' to be set for the benefit of recruiters and graduates.

Alison Whitney made it clear that Cyber Security is not an issue that would go away for the Government as they do not see the risks diminishing. The National Cyber Security Centre has been praised worldwide as an imaginative and cutting edge initiative. In partnership with GCHQ, Alison believed that recruiters would look for this accreditation of proof of a graduate's proficiency in the topic. Nevertheless, it was noted that not every university has been given this accreditation and it does require some work.

Members agreed that, as long as the department did not have to constrain themselves, there was no real downside to pursuing accreditation. Tony Field expressed the importance of getting this right the first time and outlined that the department would be happy for support and/or insight into how best to complete the application process.

6. Industry Presentation: 'The Future of Financial Services', by Pinar Emirdag (State Street)

For more information on Pinar's presentation, please see the slides of the presentation.

Following Pinar's presentation William Knottenbelt highlighted his discussion to use ICO to fund researchers. This would obviously pose some specific problems but it certainly hadn't stopped some students from doing just that. In particular, students who created a Blockchain enabled ticketing services was able to raise £20m in just 7minutes.

7. Open Discussion: Industrial Involvement in Projects

William Knottenbelt opened the discussion by explaining that the Industrial Liaison Board members were originally intended to help judge the best student projects for an award (paid from the CPP fund). In particular, it was important that the project awards would reflect the views of industry.

William highlighted that we desire support with the selection process and judging, but not with the provision of money. This would include the possibility of helping to shortlist, although the department can nominate all of the shortlist if necessary, but more specifically with the final decisions.

Members showed an interest in supporting this after the level of commitment is outlined. More information will be provided on the exact commitment and time of year that the judging would likely take place. This will include some further information on the different types of projects that students are participating in, from individual to group and short to long term projects.

8. AOB (Daniel Rueckert)

Daniel outlined how the Corporate Partnership Programme (CPP) has been fundamental in helping industry interact and recruit our UG and MSC students. However, Daniel wondered if more could be done to include PhD's and specific research in this formula. If any members can support us or offer advice in how to reshape the CPP to have this involvement at a high level.

Wendy asked specifically about the IP and how it is shared between the company and the PhD student. Daniel and Peter explained that there are different models for sharing IP depending on the research funding and contract. The key thing to do is to clearly define the expectations on this from the start and go from there.

If companies are willing to share exactly what models they are using in relations to PhD research and IP we'd like to hear them. Fortunately the department can be relatively flexible with our approach as long as it doesn't stray too far from College policy.

Members showed enthusiasm for the idea of standardising the available models so that it is clear for both the department and industry. In fact, it would be beneficial to have a standard model that used as a template at other institutions.

The discussion ended with the possibility of sending a follow-up survey to all members to further clarify their thoughts and discuss important topics broached during the meeting.

9. Close (Daniel Rueckert)