



Outreach Committee Meeting

Monday, 11 November 2019, 2 p.m., Room GC22, William Gates Building

Agenda

Membership

Tim Jones (TMJ) (Chair)
Vasundhara Agarwal, Undergraduate Student Representative (VA)
Celia Burns, Faculty Administrator and Secretary of Committee (CB)
Jonathan Goddard, Digital Communications Manager (JG)
Lise Gough, Graduate Education Manager (LG)
Tara Leggett, Undergraduate Course Administrator (TL)
Helen Neal, Undergraduate Course Administrator (HN)
Dinah Pounds, Teaching Administration Manager (DP)
Bogdan Roman, Research Fellow (ABR)
Ilia Shumailov, Graduate Student Representative (IS)
Caroline Stewart (CS)

1. Apologies for Absence

2. Minutes from the Previous Meeting

The minutes from the last meeting held on 18 February 2019 are attached (2019-11-02).

3. Report on Actions from the Previous Meeting

i. Outreach at Masters and PhD Level

The suggestion of a taster week, subsidised by the Department, for PhD students who have been made an offer was being discussed by the Senior Management Committee. LMG to report.

Action: LMG

ii. Murray Edwards College Science Blog

TMJ met with Murray Edwards College in March to discuss establishing an outreach collaboration. TMJ to report.

Action: TMJ

The Digital and Communications Coordinator, Jonathan Goddard (appointed in February 2019), was going to be asked to initiate a blog and twitter feed on the website and update the majority of photos. JG to report on progress.

Action: JG

iii. Research Group Film

The compilation of the Research Group film was still ongoing. IS to report on progress.

Action: IS

iv. Sponsorship Opportunity

A meeting between TMJ, LMG and Jan Samols to discuss IBM sponsoring events in the Department was to be arranged. LMG to report.

Action: LMG

v. CS Enrichment Days—Teaching Content and Provision of Teaching

Following a request from Westcliff High School for Boys for CS enrichment days, ABR was going to approach UG and PG students to ask for volunteers to develop the teaching content and provide the teaching. ABR was also going to draft a budget proposal and contact the University's Widening Participation Team to enquire if funding was available. CLC was going to approach the Department's Senior Management Team to enquire if any Outreach funding would be available. CLC was also going to advise Westcliff High School for Boys that nothing definite would be arranged until the teaching materials had been developed. ABR to report.

Action: ABR

vi. Girls Who Code Club

TMJ and CS were going to meet with the coordinator of the proposed club, Anna Lu, to discuss how to proceed. TMJ to report.

Action: TMJ

vii. Actions from Athena SWAN Silver Application

It was hoped that the target of 50% female helpers at the UG and PG Open Days would be met. TMJ to report.

TMJ was going to approach the Cambridge Coding Academy, if requested by the Department, to offer free room and facilities in the Department in exchange for ten free places for girls on the Cambridge Coding Academy. TMJ to report.

Action: TMJ

viii. Industrial Supporters Members Donations—Blue Sky Initiatives

At the last meeting, ABR reported on the CSAT Practice [+] Platform. The questions explore content and provide practice questions. Feedback received has requested more content. ABR said he would be willing to develop online resources if funding was available.

Action:

4. Outreach Requests / Enquiries

The following enquiries were received and responded to:

- College Computer Science Visit: a request from Tresham College (part of the Bedford College Group) to bring Computer Science students to visit Cambridge. CB sent a response suggesting that the students might like to come along to a Wednesday Seminar.
- Science Taster Day: a request from the Cambridge Admissions Office was received, asking if CS colleagues would be interested in contributing to a Science/Technology outreach event. TMJ has requested more information.

- **Coding Club Ideas:** a request from Trumpington Community College was received for assistance in setting up a coding club. CB sent a response, referring them to the Code Club website.
- **Career Information:** a request was received from an individual requesting assistance in finding information relating to a career in science and technology for his daughter. CB sent a response, referring the individual to various resources.

5. Sutton Trust Summer School 2019

Feedback has been received from the 2019 Summer School participants (2019-11-05).

6. Sutton Trust Summer School 2020

The 2020 Summer School will take place the week beginning 17 August.

7. Athena SWAN and Outreach

Committee members are asked to discuss what would make outreach better.

8. Any Other Business

9. Date of Next Meeting

The next meeting will be held on Monday, 10 February 2020 (2 p.m. in Room GC22).

Department of Computer Science & Technology

Minutes of the Outreach Committee held on Monday 18 February 2019, 2:00pm, SW00

Present: Tim Jones (Chairman) (TMJ)

Claire Chapman (Secretary) (CLC)

Lise Gough (LMG) Bogdan Roman (ABR) Megan Sammons (MS) Ilia Shumailov (IS)

1. Apologies for absence

Vasundhara Agarwal

2. Minutes from previous meeting

The Minutes from the meeting on 19 November 2018 were approved.

3. Report on actions from last meeting

i. Committee Membership

Vasundhara Agarwal, IA student has been recruited by MS to join the Committee.

ii. How to consider Outreach at Masters and PhD Level

The suggestion of a taster week subsidised by the Department for PhD students who have been made an offer is currently being discussed by the Senior Management Committee. LMG will report back on developments at the next meeting.

Action: LMG

iii. Sutton Trust Summer School

TMJ reported that *Code First: Girls* is only open to over 18 year olds and as the Summer School is for 16-17 years olds they cannot advertise it. However, women@CL have circulated information.

iv. Oxbridge Student Conferences

The names of all volunteers have been sent to the Cambridge Admissions Office and the presentation slides are being updated and will be sent to the speakers.

v. STIMULUS Programme

TMJ has been sent the contact details of Jacqui Watkins, STIMULUS coordinator

vi. Murray Edwards College Science Blog

TMJ will have a follow up meeting with Murray Edwards College in March to try to establish an outreach collaboration.

The Digital and Communications Coordinator will be asked to initiate a blog and twitter feed on the website and update the majority of photos following his appointment on 25 February.

Action: TMJ

vii. Research Group Film

The compilation of the Research Group film is still ongoing and IS will report back on progress at the next meeting.

Action: IS

viii. Sponsorship Opportunity

A meeting between TMJ, LMG and Jan Samols to discuss IBM sponsoring events in the Department still has to be arranged.

Action: LMG

4. Outreach requests

i) Westcliff High School for Boys, Essex would like to establish CS enrichment days for their year 7-9 students (Approx. 180 students)

Discussion took place on their proposal to establish CS enrichment days for their year 7-9 students.

A concern was raised that 180 students is a large cohort to teach and the students will be all-boys. A caveat was suggested to ask them to do a joint visit with a Girls School. It was suggested the event could be held over 3 days in the Department with a separate year group on each day.

The University's Science Festival in March was discussed, as talks would be of a similar content. TMJ said that it would be good if the Department can participate in the Science Festival in 2020.

ABR said that he will approach UG and PG students to ask if volunteers can be found to develop the teaching content and to provide teaching. ABR will draft a proposed budget and will contact the University's Widening Participation Team to enquire if funding is available. CLC will also approach the Senior Management Team in the Department to enquire if any Outreach Funding would be available.

CLC will contact the school with the committee's response that nothing definite will be arranged until the teaching materials have been developed.

Action: ABR and CLC

ii) Experience Cambridge Day

An Experience Cambridge Day in conjunction with the Cambridge Admissions Office, will be held on 13 July 2019, 10.30-16.30 and will be coordinated by Dr Tobias Kohn, RA in the Computer Architecture. Participants are selected from applicants who applied to the Sutton Trust Summer School.

iii) Raspberry Pi event, 30 & 31 March 2019

A course information stand will be provided for 3 hours on both days and help will be sought.

Action: CLC

iv) Initiation of a Girls Who Code club in the Department to teach secondary girls how to code

Members felt that they would be happy to support this initiative. As the proposed time to hold the weekly coding classes would be Saturdays afternoons, concern was raised that a staff member would need to be present for attendees to gain access to the building and to secure the building afterwards. Anil Madhavapeddy has agreed to be the Faculty Advisor and a suggestion was made that women@CL members could be asked to operate a rota system.

It was recommended that TMJ and Caroline Stewart should meet with the coordinator Anna Lu to discuss further details.

Action: TMJ

5. Industrial Supporters Members Donations

Donations received from members of the Supporters Club will be given the choice to support either:-

- 1) Research Student Hardship Fund
- 2) Research Pump Priming
- 3) Outreach.

The HoD has asked the committee to discuss blue sky initiatives if enough funding was available, i.e. offering pre-university courses for people who haven't had the opportunity to do CS A Level, offering a conversion course which might provide an opportunity for women with a background in numerate subjects to get into CS.

Suggestions on blue sky initiatives included:-

- Reinstatement of the Diploma or equivalent course in Computer Science to allow students from other disciplines to learn Computer Science without having prior knowledge.
- 2. To develop online resources that Computer Science teachers can use to teach Computer Science at their primary/secondary school. It was suggested that the Pre-arrival course could be made public.

ABR reported on the CSAT Practice [+] Platform. The questions explore content and provide practice questions. Feedback received has requested more content. ABR said he would be willing to develop online resources if funding is available.

- 3. To provide Computer Science Subject Master Classes where members of the public can be invited to attend to learn about new technologies and research, therefore providing public engagement.
- 4. To provide Studentships in Computer Science.

6. Transition Year at Cambridge

The committee is asked to discuss the Transition Year at Cambridge: Pre consultation document received from Professor Graham Virgo, Senior Pro-Vice Chancellor (Education) and to provide feedback.

The committee felt that providing a Transition Year course would be problematic. It would require extra resources, i.e. teaching staff, admin support, equipment, teaching rooms etc... and students would not receive a qualification.

TMJ reported that the School of Technology have opposed the idea of direct transition into Part IA following the Transition Year. TMJ said that a trial run of 50 students will initially be made in the University by subjects in the Arts, Humanities and Social Sciences. LMG queried which subject(s) in Arts, Humanities and Social Sciences Tripos would be trialled. (Afternote: Not yet known)

The committee felt this should be discussed further in the Department by the Tripos Management Committee.

7. Outreach Committee Actions from Athena SWAN Silver Application

The Committee received the actions from the Silver Award Action Plan. Referring to Action 6.1, TMJ noted that we should try and meet the target of 50% female helpers at the UG Open Days in July and the PG Open Day (date tbc).

Regarding Action 6.2, to guarantee 10 free places for girls on the Cambridge Coding Academy TMJ said that a caveat could be made to continue to offer free room and facilities in the Department in exchange for 10 free places. TMJ said he would be willing to approach the Cambridge Coding Academy if requested by the Department.

Action: TMJ and CLC

8. Any Other Business

Computer Science Masterclass

A Computer Science Masterclass organised by the Cambridge Admissions Office took place on the 16 February 2019 for Year 12 students with 3 speakers from the Department. Feedback from a speaker had been that it would be useful to have more information on the website about applications and that we should think carefully about the content delivered to attendees on these events.

Invite to Digital and Communications co-ordinator to join Committee

It was agreed Jonathan Goddard, Digital and Communications Coordinator should be invited to join the committee. CLC will ask Caroline Stewart and Jan Samols for their agreement.

Action: CLC

9. Date of next meeting

To be held in Easter Term.

From: Timothy M Jones
To: CL Faculty Admin

Subject: Fwd: Sutton Trust feedback **Date:** 15 October 2019 11:22:42

Hi Celia.

Please see below for the feedback from this year's Sutton Trust summer school. I'm not sure whether there's an archive of this, but the comments might be useful at some point.

Thanks Tim

----- Forwarded Message ------ **Subject:**Sutton Trust feedback

Date:Tue, 15 Oct 2019 08:30:13 +0000

From: AD Sutton Trust <<u>SuttonTrust@admin.cam.ac.uk</u>>

To:timothy.jones@cl.cam.ac.uk <timothy.jones@cl.cam.ac.uk>

Dear Tim,

Please find below some feedback from this year's summer school participants. If you haven't already, please return the memorandum of understanding as well as the staff contact sheet. Please also inform me of your date preferences for the summer school next year by October 25th.

Number of respondents: 13

General points on quantitative data:

Over 75% of students agreed that the academic content was pitched at the right level. Over 90% agreed that the academic content was enjoyable and that they learned lots over the duration of the summer school.

Qualitative feedback:

What did you most enjoy learning and why?

Computer architecture and how the first original reprogrammable computer was built.

Coding in Python

Algorithms

Cyber Security because it relates to what I want to do and taught me new things with interesting examples.

I enjoyed learning about computer architecture as it was in-depth and interesting

Algorithms, as it was a part of computer science I had never discussed in great depth. Hence, I learnt a great amount on the different types of algorithms and the problems they are best suited for.

I really enjoyed seeing how the course I want to do is taught at university and learning about university life

Mathematical proofs and online security

I most enjoyed learning about the Little Man Computer as it was interesting using Python to create our own version. It helped me understand more about the processes that occur when you run a computing system.

An introduction to algorithms gave me a great basis for computer science that linked and helped me to understand with a book I was reading on algorithmic puzzles

What did you least enjoy learning and why?

Python

I least enjoyed learning about mathematical logic as it wasn't very interesting

I would have preferred more specific sessions on one topic and one project rather than multiple python challenges.

Algorithms lecture because it wasn't taught in an engaging manner

Cloud computing as it is a topic that does not entirely interest me.

Cloud Computing as the concept just is not very exciting among the many computer sciences topics

Are there any topics you would have liked?

Course material

Not really

Machine learning.

Machine learning is quite a popular topic and it would have been nice to have a presentation or short lecture on it.

Machine learning and artificial intelligence are very relevant today but there was no talk specifically on these areas.

Are there any topics you would have liked to cover in more detail?

They could have covered cloud computing more as it was also very interesting Dynamic programming.

Mathematical proofs and ethics

I would have liked to look at the mathematical foundation of algorithmic methods.

How has your perception of the subject changed?

No it hasn't

I think computer science is much broader that I initially thought now

Computer science considers the ethical and moral issues when developing new technology or when tackling a problem.

Yes, it made me realise more how diverse Computer Science can be, and the fact that it allows you to work on and explore a range of different topics.

Any other comments on the academic sessions?

The small tasks were nice

Best wishes.

Éireann Attridge
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Timothy M. Jones http://www.cl.cam.ac.uk/~tmj32/