

News from across SICSA

SICSA PhD Conference 2013

Steven Kendrick



Dr Marwan Fayed and Professor Muffy Calder at the 2013 Conference. Image by Ken Reid



For the first time, this year's SICSA PhD Conference was held at the University of Stirling. The conference took place between 12-13 June and was organised by a hard-working committee of PhD students; members of the SICSA Executive; and chaired by Dr Marwan Fayed of the University of Stirling. The conference was a sell-out event, with all tickets allocated within 10 days of the registration opening!

This year, the theme of the conference was "Communication and Working Together", and the two day event consisted of a number of activities related to this theme, including a pitching competition; poster sessions; transkills sessions; workshops on a variety of technical subjects and a careers panel & debate.

This years keynotes were Professor Ben Shneiderman of the University of Maryland and Professor Muffy Calder of the University of Glasgow and Chief Scientific Advisor for Scotland.

CIAO 2013

Ewen Maclean, Heriot-Watt University

The 22nd CIAO workshop was held at The Burn, Brechin from 22-24 April 2013, and included participants from 3 Scottish Universities; namely Dundee, Heriot-Watt and Edinburgh and from Universities elsewhere in Europe, including Oxford University and the German Research Centre for Artificial Intelligence in Bremen, and Chalmers University in Gothenburg. The workshop consisted of two days of presentations, with time in between filled with discussions about complementary research.

The SICSA CSE theme funded subsistence for 5 PhD students based in Scottish Universities. The help from SICSA proved invaluable. Each accepted PhD student was required to give a talk, all of which were very well received and in many cases promoted greater potential links between universities. Iain Whiteside, a participant from University of Edinburgh said "I would like to acknowledge the support of SICSA to allow me to attend the CIAO 2013 workshop. The workshop provides a wonderful, informal forum to express my ideas and gain some feedback from experts in the field".

There was a great atmosphere at the conference this year and feedback so far has been very good indeed. Slides for all sessions will be available for download from the SICSA PhD Conference web site (www.sicsaconf.org) in due course - there are already a number of presentations available. We would also encourage you to have a look at the photographs from this years event and the videos, again both available at the main conference web site. The videos are also available to view at the SICSA YouTube Channel.

The SICSA PhD Conference is open to all PhD students in computer science and informatics in Scotland, not just those students funded by SICSA. Planning for the 2014 event is already underway. Please check the SICSA events calendar and social media feeds later this year (www.sicsa.ac.uk/events) for updates.

If you would like to join the organising committee for the 2014 event, please contact admin@sicsa.ac.uk as soon as possible to register your interest.

Women in Computing Panel, Edinburgh, 8th May 2013

Prof. Jane Hillston, University of Edinburgh



The Panel

On Wednesday 8th May approximately 55 women and a few men gathered in the Informatics Forum for the first Scottish screening of she++: The Documentary (<http://sheplusplus.stanford.edu/film/>). This 12 minute film has been directed by two female undergraduates at Stanford University and is intended to encourage and inspire other women to become involved in computer science. The she++ group at Stanford calls itself a community for innovative women in technology, and organizes an annual symposium for college and high school students and industry professionals on what it is to be a woman working in technology. The participants at the Edinburgh event came from a number of SICSA institutions and ranged from undergraduates to professors.

After a brief introduction by Bonnie Webber, who had organized the screening, the audience watched the short film attentively. A lot was packed into the 12 minute film, which included a number of different perspectives from high-school students who are just enjoying their first successes with technology to industry leaders such as Jocelyn Goldfein of Facebook.

For the Edinburgh screening to initiate the discussion after the film we had assembled a panel of women with a range of different experiences. The panel consisted of:

- Sathya Smith, Head of Partner Solutions at Google, London
- Marcia Rankin, Head of Health Information Services, NHS24, NHS Scotland
- Jane Hillston, Professor and Director of the LFCS, School of Informatics, University of Edinburgh
- Lexi Birch, Research Associate, ILCC, School of Informatics, University of Edinburgh

Each of the panellists was asked to give her first response to the documentary before questions and comments from the audience were invited.

There was a lively discussion with reaction to the film from both the panel and the audience. Many of us felt that it would be great if all young women in S1/S2 in schools across Scotland could see the film before making their subject choices for S3.

After the discussion there was a delicious afternoon tea and further opportunity for the audience to interact with the panellists and each other.

SICSA MMI Doctoral Consortium 2014

Prof. Stephen Brewster, University of Glasgow

As a precursor to the SICSA PhD conference, the MMI theme ran a Doctoral Consortium at the University of Stirling on 11 June, 2013. The event was designed to help PhD students in the Multimodal Interaction theme to present their ideas and to get feedback from experienced researchers in a friendly environment. Five students representing the University of Glasgow, Dundee University and Edinburgh Napier University took part in the event. The format for the day was that each participant had 15 mins to present their research and this was followed by 30 mins of discussion with the members of the DC.

Prior to the event each student was assigned a paper of another participant to read and it was that person that began the discussions. Each paper was also read by two of the organisers, who then contributed to the discussions before opening the discussion out to all participants. This format worked well and allowed for plenty of constructive comment and lively debate.

The day concluded with an open discussion about the process of the PhD and the students took the opportunity to debate matters such as: the structure of the thesis; strategies for proofing the thesis and handling the viva & finally, dealing with time pressures when writing up.

The event was very successful and informative for all that took part and most importantly it was a timely reminder that PhD students across all of the SICSA institutions have a wealth of experience that they can share with each other.

In keeping with this idea we are already planning for a MMI DC in 2014.

SICSA MMI: Pre-CHI Event

Prof. Aaron Quigley

On April 23rd 2013 from 10am - 4pm at University of St Andrews SICSA MMI held a Pre-CHI day. This day was to allow those from across SICSA who have 16 notes, papers and TOCHI papers presented at CHI 2013 in Paris to have a dry run.

The aim of the day was many-fold, including:

- a final dry run of your talk with feedback
- an opportunity to inform SICSA colleagues about SICSA HCI work
- a chance to snap-shot HCI research in Scotland in one day.

The papers presented included:

1. **The Effects of Tactile Feedback and Movement Alteration on Interaction and Awareness with Digital Embodiments**

A. Doucette (Univ. of Saskatchewan, CA)R. Mandryk (Univ. of Saskatchewan, CA)C. Gutwin (Univ. of Saskatchewan, CA)M. Nacenta (Univ. of St Andrews, UK)A. Pavlovych (Univ. of Saskatchewan, CA)

2. **Multi-Touch Rotation Gestures: Performance and Ergonomics**

E. Hoggan (Helsinki Institute for Information Technology, FI)J. Williamson (Univ. of Glasgow, UK)A. Oulasvirta (Max Planck Institute for Informatics, DE)M. Nacenta (Univ. of St Andrews, UK)P. Kristensson (Univ. of St Andrews, UK)A. Lehtiö (Helsinki Institute for Information Technology, FI)

3. **Memorability of Pre-designed and User-defined Gesture Sets**

M. Nacenta (Univ. of St Andrews, UK)Y. Kamber (Univ. of St Andrews, UK)Y. Qiang (Univ. of St Andrews, UK)P. Kristensson (Univ. of St Andrews, UK)

4. **Improving Two-Thumb Text Entry on Touchscreen Devices**

A. Oulasvirta (Max Planck Institute for Informatics, DE)A. Reichel (Max Planck Institute for Informatics, DE)W. Li (Max Planck Institute for Informatics, DE)Y. Zhang (Max Planck Institute for Informatics, DE)M. Bachynskyi (Max Planck Institute for Informatics, DE)K. Vertanen (Montana Tech of The Univ. of Montana, USA)P. Kristensson (Univ. of St Andrews, UK)

5. **Supporting Personal Narrative for Children with Complex Communication Needs**

R. Black (Univ. of Dundee, UK)A. Waller (Univ. of Dundee, UK)R. Turner (Data2Text, UK)E. Reiter (Univ. of Aberdeen, UK)

6. **Use of an Agile Bridge in the Development of Assistive Technology**

S. Prior (Univ. of Abertay Dundee, UK)A. Waller (Univ. of Dundee, UK)T. Kroll (Univ. of Dundee, UK)R. Black (Univ. of Dundee, UK)

7. **'Digital Motherhood': How does technology help new mothers?**

L. Gibson (Univ. of Dundee, UK)V. Hanson (Univ. of Dundee, UK)

8. **The Emotional Wellbeing of Researchers: Considerations for Practice**

W. Moncur (Univ. of Dundee, UK)

9. **Designing Web-Connected Physical Artefacts for the 'Aesthetic' of the Home**

S. Ylirisku (Aalto Univ., FI)S. Lindley (Microsoft Research, UK)G. Jacucci (Helsinki Institute for Information Technology, FI)R. Banks (Microsoft Research, UK)C. Stewart (Univ. of Dundee, UK)A. Sellen (Microsoft Research, UK)R. Harper (Microsoft Research, UK)T. Regan (Microsoft Research, UK)

10. **iPhone In Vivo: Video Analysis of Mobile Device Use**

B. Brown (Mobile Life @ Stockholm Univ., SE)M. McGregor (City Univ. London, UK)E. Laurier (Univ. of Edinburgh, UK)University of Edinburgh

11. **Categorised Ethical Guidelines for Large Scale Mobile HCI**

D. McMillan (Mobile Life @ Stockholm Univ., SE)A. Morrison (Univ. of Glasgow, UK)M. Chalmers (Univ. of Glasgow, UK)

12. **Focused and Casual Interactions: Allowing Users to Vary Their Level of Engagement**

H. Pohl (Univ. of Hanover, DE)R. Murray-Smith (Univ. of Glasgow, UK)

13. **Note: Multiple Notification Modalities and Older Users**

D. Warnock (Univ. of Glasgow, UK)S. Brewster (Univ. of Glasgow, UK)M. McGee-Lennon (Univ. of Glasgow, UK)

14. **Exploring & Designing Tools to Enhance Falls Rehabilitation in the Home**

S. Uzor (Glasgow Caledonian Univ., UK)L. Baillie (Glasgow Caledonian Univ., UK)

15. **Tactile Perceptions of Digital Textiles: A Design Research Approach**

D. Atkinson (Brunel Univ., UK)P. Orzechowski (Heriot-Watt Univ., UK)B. Petreca (Brunel Univ., UK)N. Bianchi-Berthouze (Univ. College London, UK)P. Watkins (Brunel Univ., UK)S. Baurley (Brunel Univ., UK)S. Padilla (Heriot-Watt Univ., UK)M. Chantler (Heriot-Watt Univ., UK)

16. **Understanding Exergame Users' Physical Activity, Motivation and Behavior Over Time**

A. Macvean (Heriot-Watt Univ., UK)J. Robertson (Heriot-Watt Univ., UK)

SICSA Personnel Rotation

Steven Kendrick

Towards the end of the summer there will be a number of personnel changes occurring within SICSA. The changes include:

SICSA Education Directorship: After a number of years of commitment to SICSA, Professor Greg Michaelson (Heriot-Watt University) will step down as Director of Education from 1st September 2013. SICSA is the only research pool to have developed a coordinated and successful Education element and this is in no small part thanks to the hard work and passion provided by Greg. Greg will be replaced by Dr Karen Petrie (University of Dundee).

SICSA Graduate Academy Directorship: After one year as Director of the SGA, Dr Sharon Goldwater (University of Edinburgh) will be going on sabbatical from 1st September 2013. We would like to take this opportunity to thank Sharon for all of her hard work and dedication to SICSA. In her place will step Professor Jon Oberlander (University of Edinburgh). Jon brings with him considerable knowledge and experience of SICSA, having been overall Director (and integral in the original bid) when SICSA was established in 2008. Following that, Jon was SICSA Deputy Director/Director of Knowledge Exchange until 2012.

Next Generation Internet Theme Leadership: After many years of leading the NGI theme, Professor Saleem Bhatti (University of St Andrews) will be stepping down from 1st August 2013. SICSA would like to extend thanks to Saleem for all of the energy that he has put into leading the theme over the years, as well as to the deputy theme leaders: Dr Tristan Henderson (University of St Andrews); Dr Mahesh Marina (University of Edinburgh); and Dr Colin Perkins (University of Glasgow). Saleem and the current deputies will be replaced by Dr Marwan Fayed (University of Stirling), who recently chaired the SICSA PhD Conference 2013. Marwan will also act as the main academic contact for the SICSA Cyber-Security sub-theme.

We would like to take this opportunity to warmly welcome all of the new SICSA personnel, who all mark another new chapter in the SICSA story.

SICSA students make up 1 in 3 of graduates on the Silicon Valley Internship Programme

Nicola Hogg



**SILICON VALLEY
INTERNSHIP PROGRAMME**

Internships are a fantastic way of gaining real world experience to enhance your research going forward, but also lay the foundations for a successful career path once you graduate. The value of your network is priceless. The Silicon Valley Internship Programme is one of the finest quality intern schemes available to Software and Engineering Students in the UK, offering a priceless experience working with 'hot' Silicon Valley start-ups...and the \$60,000 salary isn't too bad either! The Valley possesses a pervasive 'can do' attitude, and it is hoped this will be brought back to the entrepreneurial community in the UK by the graduates. Of the 15 selected for the programme, five were from SICSA institutions, which is testament to Scotland's strength in this industry. So congratulations to Stewart Taylor from

the University of Dundee and Marat Subkankulou; Barney Jackson; Chris Howard and Chris Atkin-Granville, all from the University of Edinburgh. They will be departing for the Bay this Summer and we wish them all the best for the year ahead.

Keep your eyes peeled for future SVIP calls and remember that SICSA offers its own internship programme which gives you the flexibility and freedom to arrange an internship to be part funded by SICSA...anywhere in the world!

The next call for this scheme will be 31 October 2013.

Four SICSA students create a spark at Ignite

Nicola Hogg

Each year Informatics Ventures send budding entrepreneurs from SICSA down to Cambridge for an intensive one week training programme called Ignite. This year saw David Warnock and Stefan Raue from the University of Glasgow, and Sarah Morgan and Michael Boyd from the University of Edinburgh make the pilgrimage to receive some of the finest entrepreneurial training available in the UK specifically aimed at the high-tech sector. During the week participants of the programme receive the tools, contacts and confidence to transform their idea into a successful business project or venture. We'll be sure to keep an eye on these four for the next big thing, but if reading this has sparked an entrepreneurial spirit in you there are a number of opportunities available closer to home through SICSA and Informatics Ventures. If you are tentatively taking the steps towards entrepreneurship, the SICSA Research Ventures course runs annually in June and is a great crash course in commercializing research. Look out for calls in the Spring for this. Informatics Ventures also run a week long boot camp called 'School for Entrepreneurs', which is held every September. This school is a great platform for developing your idea and provides a good grounding if you wish to be considered for Ignite in the future.



Photo Credit: Ronnie Johnston

1st SICSA Scottish Information Retrieval (IR) Workshop

Dr Martin Halvey, GCU

The 1st SICSA Scottish Information Retrieval (IR) Workshop took place on May 31st in Glasgow Caledonian University. The event was co-organised by the University of Glasgow Caledonian and the University of Glasgow. The focus and aim of this workshop was to bring together IR researchers from the various Scottish universities in order to facilitate more awareness and increased interaction.

The workshop had a total of 41 SICSA attendees, comprised of 30 registered attendees and 11 SICSA speakers from 8 different SICSA institutions (Glasgow Caledonian University, University of Glasgow, Strathclyde University, University of Aberdeen, Robert Gordon University, Heriot Watt University, University of Edinburgh, and University of Dundee Abertay).

The scientific program included a keynote talk, a minute madness session, research talks, demos and posters. The madness session allowed all attendees to outline their research interests and interest in IR, the wide range of interests/research included personal music retrieval, social media filtering for emergency management, retrieval of cultural and heritage objects, ranking for aggregated search, developing models of findability etc.

The keynote was provided by Prof. Arjen de Vries (CWI, Amsterdam) who is a world leading IR researcher; he provided an overview of the problems and challenges of finding strategic information within the enterprise. The SICSA speakers then covered a wide range of topics. Jesus Rodriguez Perez, (University of Glasgow) talked about using inter-document relations in microblog retrieval. Prof Miles Osborne (University of Edinburgh) discussed efficient

cross stream event detection social media, in particular for event detection in twitter. Dr Tiphaine Dalmas, (University of Edinburgh) described question answering with Spa-book, which is a speech-driven, hands-free, eyes-free mobile application for pedestrian navigation and exploration in urban environments. Dr Matt-Mouley Bouamrane (University of Glasgow) discussed information management in the patient surgical pathway in NHS Scotland. Dr Nava Tintarev (University of Aberdeen) presented work from SaSSY which examines explanations in scrutable autonomous systems (agents, planning and argumentation dialog). Prof Ayse Goker (Robert Gordon University) discussed the benefits of adopting a user centred approach to designing multimedia IR systems. Dr Craig MacDonald (University of Glasgow Sensor) talked about sensor and social search within smart cities. Following on from this Dr M-Dyaa Albakour (University of Glasgow) described his approach to local event retrieval with social sensors. Dr Martin Halvey (Glasgow Caledonian University) outlined an examination the effort involved in making relevance assessments as part of the information retrieval process. Dr Dmitri Roussinov (University of Strathclyde) outlined the use of web n-grams to automatically recognize important aspects of products in opinions when shopping. Dr Leif Azzopardi (University of Glasgow) outlined how economics can be used to model the interaction between a user and system in the context of search.

The event concluded with a discussion session which centred on future SICSA IR events and collaboration amongst the community.

SICSA Distinguished Visitors

Nicola Hogg

The academic year saw eleven distinguished visiting fellows visit SICSA, delivering a total of 35 seminars and master classes across Scotland. Visits ranged from one week to three months and gave the SICSA community the opportunity to interact and engage with eminent researchers who may normally not be accessible to them. One of our longest visitors this year, Prof. Wyatt Newman, was a familiar face among the corridors of the informatics Forum for three months and shared his thoughts on the visit:

What are your impressions of SICSA and the Scottish Informatics and Computer Science community?

I was pleased to be part of the dynamic research environment in Informatics at U.Edinburgh. I also enjoyed the hospitality of my hosts at U. Glasgow and Heriot-Watt. I was less aware of the research going on in these institutions and was impressed with what I saw.

What were the levels of participation and engagement at your events?

Attendance at my seminars and at my master class was strong. The master class drew from 5 SICSA universities. I also gave guest lectures in two classes, offered an update briefing on the DARPA Robotics Challenge to IPAB members, and offered a tutorial introducing "ROS" (Robot Operating System). I had hoped to attract interest in collaborating on competing in the DARPA Robotics Challenge, and it appears that there is significant interest. I also enjoyed attending a variety of interesting seminars and workshops within Informatics, as well as weekly meetings of my host's research group and weekly meetings of a study group within IPAB.

Did the visit meet with your expectations in terms of collaborations achieved and engagement from the SICSA community?

It is still too early to evaluate the strength of continuing collaborations. However, I am optimistic that Informatics researchers at U. Edinburgh, and perhaps additional SICSA universities, will be collaborating with me on the DARPA Robotics Challenge.

Professor Wyatt Newman Biog

Professor Newman is a professor in the department of Electrical Engineering and Computer Science at Case Western Reserve University. His research is in the areas of mechatronics, robotics and computational intelligence, in which he has 12 patents and over 125 technical publications. He spent 8 years in industrial research at Philips Laboratories, Briarcliff Manor, NY, engaged in electromechanical design and control, and in 1992 he was named an NSF Young Investigator in robotics. He was subsequently named a Herbold Fellow, a Tau Beta Pi "distinguished engineer", a Woody-Flowers FIRST-robotics mentor awardee, and a CWRU awardee for teaching and for leadership. In 2007, he led "Team Case" in the DARPA Urban Challenge, involving autonomous vehicles operating among live and robotic traffic.



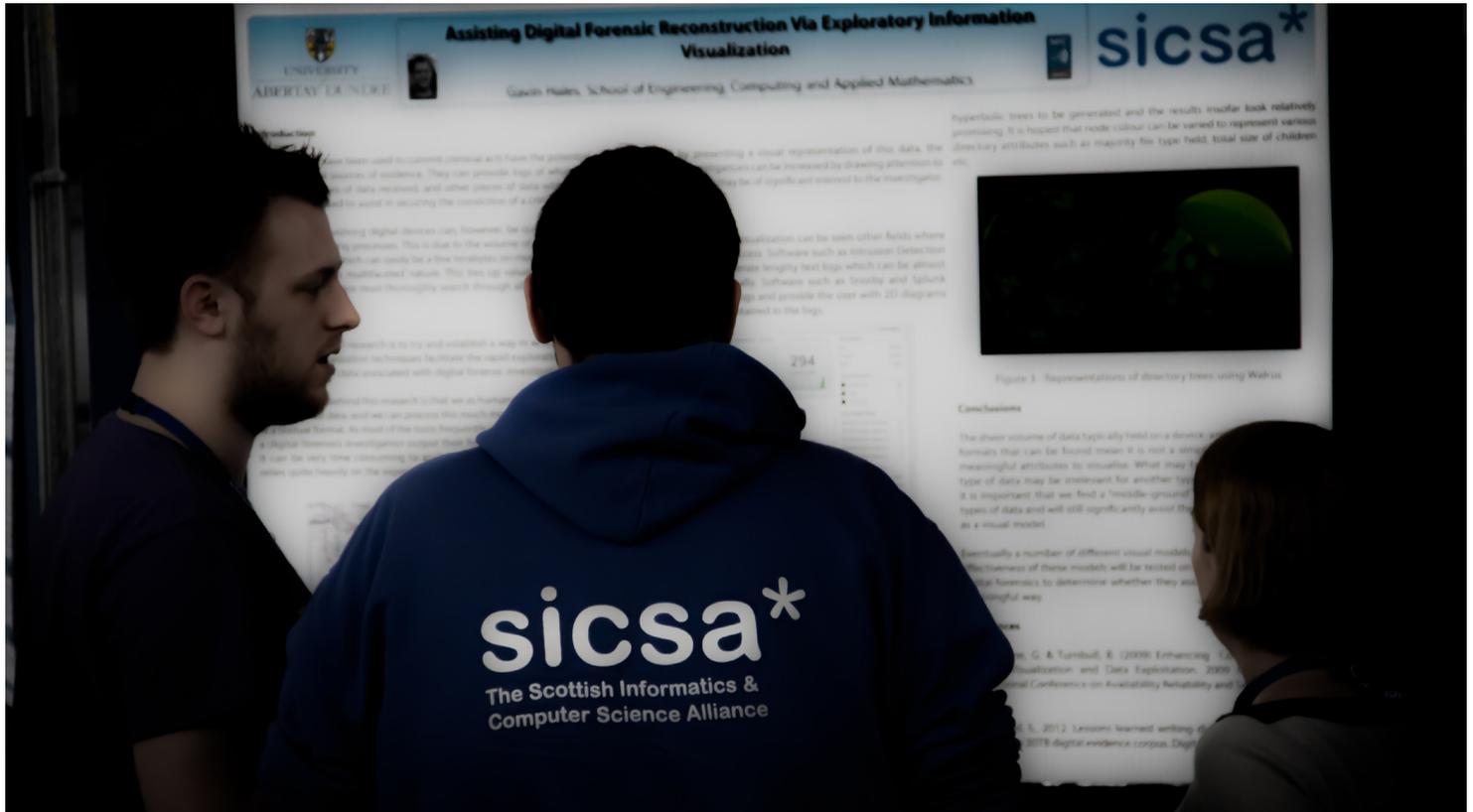
How to make an application for DVF Funding

Nicola Hogg

The DVF scheme is a fantastic way to make top quality researchers accessible to all and the organized events provide great opportunities to meet up with colleagues from other institutions. If you have someone in mind as a DVF, please use the SICSA funding available to bring them over. You may wish to bring someone as a keynote speaker for a conference or Summer School for example, and have them stay on for a few weeks to maximize their time with SICSA and you as a host. Please also remember that this scheme is not limited to academic visitors with funding for industrial visitors available through the DIVF scheme. The next round for applications will be 31 October 2013.

SICSA Events

To find out more about forthcoming SICSA events, please visit www.sicsa.ac.uk/events or keep up-to-date with our social media feeds. Please note that a number of further events will be advertised in the coming weeks.



August 2013

Sun Aug 25 - Thu Aug 29: SICSA Summer School on Cognitive Computation, University of Stirling

Thu Aug 29 - Sat Aug 31: 13th International Conference on Intelligent Virtual Agents (IVA 2013), University of Edinburgh

Wed Aug 28: SICSA DVF Prof Jonathan Seldin talk, Heriot-Watt University

September 2013

Tue Sept 3: SICSA DVF Prof Jonathan Seldin talk, University of St Andrews

Sat Sept 7 - Wed Sept 11 : 22nd International Conference on Parallel Architectures and Compilation Techniques (PACT'13), University of Edinburgh

Sun Sept 8: SICSA CSE Workshop on Parallel Quantum Computing (ParQ 2013), University of Edinburgh

Tues Sept 17: SICSA CSE - SEABIS Meeting, Edinburgh Napier University

October 2013

Wed Oct 2: SICSA Cyber-Security Meeting, Glasgow Caledonian University

Sun Oct 6 - Wed Oct 9: ITS (Interactive Tabletops and Surfaces) 2013, University of St Andrews

Tues Oct 8 - Fri Oct 11: UIST (User Interface Software and Technology) 2013, University of St Andrews

News Items

If you have any newsworthy items that you would like to contribute to the Winter 2013 edition of the SICSA Newsletter, please contact admin@sicsa.ac.uk.