

## News from the Department of Computer Science

Dear Alumni,

We hope issue 4 of CS Alumni News gives you a flavour of the latest research, collaboration and teaching news from the department. I am very pleased to include an invite to all CS Alumni and friends of the department to a forthcoming Distinguished Lecture hosted jointly by CS and Department for Security & Crime Science:

### ***How Cryptosystems Are Really Broken*** by Prof Adi Shamir,

Co-inventor of the RSA cryptosystem and Turing Prize winner.

Wednesday 20 June 2012, 4pm, Roberts 106 LT. A drinks reception will follow in MPEB 5.10.

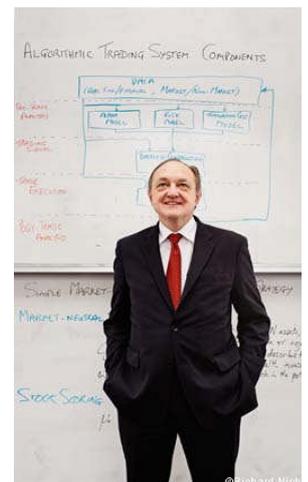
To book your free tickets please see here <http://adishamirlecture.eventbrite.com/>

### Financial Computing Centre in the Financial Times

The Financial Computing Centre at UCL is a collaboration with CS, the London School of Economics, the London Business School and 20 leading financial institutions. The centre's work has now been featured in a major article in the Financial Times. The article - "[School for quants: Inside UCL's Financial Computing Centre, the planet's brightest quantitative analysts are now calculating our future](#)" - describes breadth of the centre's work. It includes interviews and comments from the centre's director, Professor Philip Treleven, and from several of the current crop of research students and undergraduates.

The Centre engages with highly regarded and experienced academic advisors in the field of financial computing, allowing our PhD students to work with the best supervisors to achieve a deep knowledge of their research subject areas. Financial Computing spans Financial IT, Computational Finance and Financial Software Systems Engineering. PhD research areas include software engineering, computational statistics & machine learning, high performance computing, mathematical modelling, and statistical & signal processing.

To see more about the Centre see [here](#)



Prof Philip Treleven

### ***Digitized: The Science of Computers and How it Shapes our World***

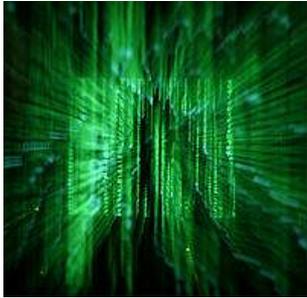
CS celebrated the launch of a new book, *Digitized: The Science of Computers and how it shapes our World*, by Dr Peter Bentley, Honorary Reader in the Department, with an evening in Waterstones Gower Street. Alongside distinguished guests including Prof Peter Kirstein, who gave an introduction to the book, Peter outlined some of the key moments that *Digitized* highlights as it takes the reader on a journey of discovery through the history of computer science, including initial theoretical conceptions, early pioneers and implications for the future.



*Digitized* covers the whole of computer science - from maths to engineering to social sciences and has received warm reviews already in *Wired Magazine* and *The Guardian*. The book appeals to general readers interested in computers or working with computers, and also younger students considering undergraduate computing, computer science, and IT courses. Peter was happy to personally sign copies afterwards as friends of CS enjoyed drinks and a chance to talk to the author. We would like to thank Waterstones for hosting a great event.

## UCL Academic Centre of Excellence in Cyber Security Research

UCL is one of eight UK universities conducting world class research in the field of cyber security that have been awarded "Academic Centre of Excellence in Cyber Security Research" status. The Academic Centre of Excellence status has been awarded by GCHQ in partnership with the Research Councils' Global Uncertainties Programme (RCUK) and the Department for Business Innovation and Skills (BIS). The Centres of Excellence will benefit the UK by: enhancing the UK's cyber knowledge base through original research; providing top quality graduates in cyber security; supporting GCHQ's cyber defence mission; driving up the level of innovation.



The Centres of Excellence will help make the UK government, business and consumers more resilient to cyber attack by extending knowledge and enhancing skills in cyber security. Professor Angela Sasse, Head of Information Security Research at UCL: *"We are delighted that the EPSRC and GCHQ recognise that UCL makes a substantial contribution to protecting the UK in a digital world. Our Computer Science Department played a leading role in the development of the Internet, and we will continue to develop solutions to keep it secure. The Centre will be a focal point for the wide range of academic knowledge and skills in UCL that will help us to achieve this."*

More information about the award can be seen [here](#)

## Developing prize winning apps



CS is proud to be the first UK university department to incorporate Apps development into our core curriculum courses. This term we hosted our first Apps prizegiving, for MSc Computer Science and Financial Computing students. Morgan Stanley partnered with UCL Advances to provide a £900 prize fund for students who produced the best applications to teach novice learners how to program.

Many of the final products were suitable for market, and will be released soon. Winners were awarded their cash prizes by Jonathan Daplyn, Head of the Global Listed Derivatives Technology Group at Morgan Stanley. The teaching team would like to thank all students for their hard work, the Apps teaching assistants Maciek Gryka and Jozef Dobos for their dedication, and Morgan Stanley and UCL Advances for recognising the students' potential.

MSc Computer Science winners:

1st Kavi Dhokia £200  
(pictured right with Jonathan Daplyn)

2<sup>nd</sup> Andrew Newman £150

Joint 3<sup>rd</sup> Becker Ingolf /  
Fei Gao £50 each



MSc Financial Computing winners:

1<sup>st</sup> Xin Zhang - £200  
(pictured right)

2<sup>nd</sup> Lifan Zhou - £150

3<sup>rd</sup> Derek Ho - £100



## CS Researcher wins Google Scholarship

Larissa Dos Santos Romualdo, member of the Software Systems Engineering group, has been awarded a prestigious Google Europe, Middle East and Africa ([EMEA Anita Borg Memorial Scholarship](#)) for 2012. This scholarship was created by Google to mark the life and vision of Dr. Anita Borg (1949-2003).



Scholarships are awarded based on the strength of candidates' academic performance, leadership experience and demonstrable passion for computer science. Larissa is conducting research in Smart Cities, specifically researching middleware architecture for city-wide delivery of services. Speaking of her award Larissa said: *"I am very pleased to be one of the recipients of the Google Anita Borg Scholarship. Winning this scholarship is very rewarding. I have a huge passion for computer science and I am proud to be a woman in the field of engineering. I am fortunate enough to receive this scholarship and to be a PhD student at UCL at the same time. UCL was the first University in England to admit women on equal terms with men, and I believe this is the ideal academic Institution for any woman who aspires to be part of the next generation of female leaders."*

## Forgotten Facebook friends could still be snooping on you

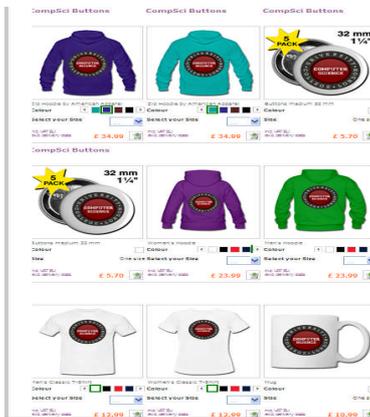
Forgotten Facebook friends who don't appear in your friends list could still be snooping on you, new CS research shows. In their research paper, "[Your Facebook Deactivated Friend or a Cloaked Spy?](#)" CS student Shah Mahmood and Chair of Information Communication Technology Prof Yvo Desmedt have identified what they called a "zero-day privacy loophole", enabling a person to deactivate his own account and then later, upon reactivating the account and shedding his privacy "cloak," to quickly view his friends' profiles before disappearing into the darkness again. The pair label this behaviour "cloaking" and cannot resist explaining it with a *Star Trek* metaphor, writing "*Badass Blink or Jem'Hadar has to uncloak (be visible), even if only for a moment, to open fire.*"



The [extended abstract](#) asserts cloaking is a problem because many Facebook users aren't very discriminating about whom they befriend on the service. Some could therefore Friend members whose only intention is to "cloak" their accounts and then "... activate his account at the moment least likely to be detected and crawl his victims profile for information, keeping an updated record. Various groups of information aggregators including marketers, background checking agencies, governments, hackers, spammers, stalkers and criminals would find this attractive as a permanent back door to the private information of a Facebook user."

Facebook declined to comment.

## Computer Science Shop – CS student customize their own products!



Are you good at designing?  
Do you have the entrepreneurial spirit in you?  
Ever wanted to create something that hundreds of people see everyday?

Students have been busy working on the CS Design Competition to create a logo to put on exciting products to go on sale on the web!

Every year students design the products, set the prices (and the profit margin!) and spend the income (with the Departmental Staff Student Consultative Committee.

Well worth a look [here](#) !

## Keep up-to-date with the latest CS News

Don't forget...

- Check us out on the web <http://www.cs.ucl.ac.uk/index.html>
- You can like us on Facebook [here](#) !!!
- Or follow us on Twitter [here](#) !!!

Kind regards,

John Shawe-Taylor  
Head of Department  
Professor of Computational Statistics and Machine Learning