Computer Science
@Nottingham

School of Computer Science Newsletter 2015

Where can your future go?

Final year student, Paula Clerkin, working in the Computer Science Atrium.

Oscar announcements
Find out who was nominated for this year's awards

Chart-topping students
Read more about app that took the market by storm, created by Nottingham students

Boosting your career prospects
Find out more about our careers events and opportunities available to you

Welcome to the School of Computer Science

We're pleased that you're considering studying one of the most diverse and relevant subjects of the 21st century, and delighted that you're thinking of studying it at The University of Nottingham.

We offer world-class teaching and a stimulating study environment, and you'll benefit from up-to-the-minute software and dedicated computer labs. Our connections with employers also open up exciting possibilities for your year in industry or summer internship, if you choose to take this option.

Our degrees are designed to equip you with an in-depth knowledge of how computers work and how that knowledge can be applied to design and implement the systems of the future. Coupled with an impressive range of valuable transferable skills such as problem solving, project management and independent research, you will be well positioned to apply for roles with companies such as Adobe, Google, IBM and Microsoft.

Our staff and students are currently exploring areas including mobile computing, the fundamental principles of logic and discrete mathematics, and the application of those principles to gaming, scheduling and driving robots. There are lots of other great things happening in the school, which you can read about over the next few pages.

Please do feel free to contact us with any questions you may have by emailing **admissions@cs.nott.ac.uk**, or via our twitter account **@UoNComputerSci**.

We hope you enjoy reading this newsletter and that we will see you soon, whether it is at one of our visit days or upon you registering for your programme.

Professor Uwe Aickelin
Head of the School of Computer Science

Successful careers events

Our programme of careers events is proving to be very popular and successful. Here is a taste of what's on offer.

Careers in Computing Fair

Each year we work alongside the Careers and Employability Service to hold a careers fair, exclusively for Computer Science students. We host big names from major consultancies including Accenture and Deloitte, software development houses such as Amazon, and many more, including Boots and Imagination Technologies. The fair gives students the opportunity to get the latest tips on successfully applying to graduate roles and internships, as well as discovering new opportunities with employers.

This year, we will be hosting a Careers in Technology Start-ups and SMEs fair. This will be a chance for students to find out what it is like to work for a Technology SME. Some of the companies attending such as the local Esendex, both employs graduates and offers internships.

For more information please visit:
www.nottingham.ac.uk/careers

Speed networking

Our speed networking sessions are a great way for our students to talk to employers in an informal setting. They open doors to new opportunities in graduate schemes and internships with employers such as Deloitte, Accenture and ATOS.

Each session with an employer lasts about 15 minutes and takes place in a small group setting; students hear about the opportunities available and ask their own questions, before moving on to the next employer. At the end of the event students get the chance to mingle with employers to ask any further questions.

Our programme of careers events is proving to be very useful, look out for future sessions on CV reviews; careers guidence; mock interviews; employer drop-ins; and e-mentoring schemes.

For more information, please visit:
www.nottingham.ac.uk/careers/students/events

Student profile

"My highlight would definitely be the programming module in the first semester. They assume you know nothing but by the end of it you're writing big pieces of software. You can see what you've made and that's really great."

Michael Coward
BSc Computer Science with Artificial Intelligence

▶ Find out more about Michael's experience at
www.nottingham.ac.uk/ugvideos/michaelcoward

Scan the code to watch this video on your smartphone.

Michael is part of the Computer Science (CS) Guru Scheme, where first-year students can get advice and support from students who excelled in their first year.

Oscar success

The University Staff Oscars is an entirely student-led awards scheme facilitated by the Education Network of the Students' Union, and has been running in it's current format for three years.

The School of Computer Science has won a Staff Oscar for Best School/Department.

The Staff Oscars is a student-led event, with them nominating staff or their departments for categories such as: Most Inspiring Teacher, Best Dissertation Supervisor, Best Member of Support Staff and Best School/Department.

The school is extremely honoured to have been awarded this Oscar, and proud that we offer our students great teaching, great community, great support and a lot more!

On receipt of the award Head of School, Professor Uwe Aickelin, said: "I would like to thank the Student Union for awarding us the Student Oscar for Best School.

We are thrilled that the school has won this award, which is a great honour and fantastic recognition from our students of the work we are doing to make the school an exciting and welcoming place. I'd like to thank all staff and students for the effort they have put in to making Computer Science at Nottingham a great place to work and study. Our vision is to become one of the best places internationally to study Computer Science, and I'm sure this award will spur us on to work even harder to achieve this goal. Thank you all again for this tremendous endorsement!"

Above: Computer Science staff and students with their Oscar.

HackSoc wins at StudentHack

HackSoc is a student-led society which is aiming to further the exploration of programming and related activities, teach new skills and create awesome software.
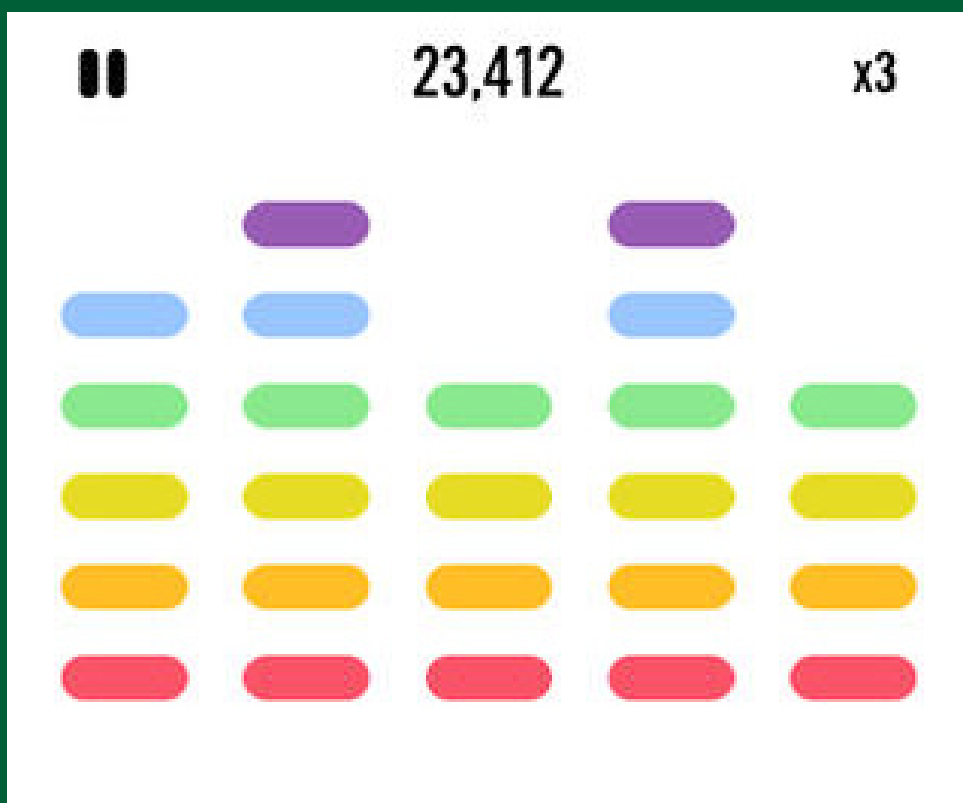

HackSoc is open to students of all programming experience

Hacksoc is one of two student societies at Nottingham with an interest in computer science. It started out with 35 members and has increased to 150 in just eight months. During this time, Hacksoc has attended nine national hackathons and has had winning hacks at five of these events!

One success was at StudentHack, Europe's largest, student-run hackathon. A group of five students created an app to allow people to share their resources such as electricity, WiFi, hot drinks, toilets, or even offering to host social gatherings. Hosts upload a profile advertising what they're willing to share and users get a filterable list of services available in their local area, along with a GPS position and a map. The app was created in the context of the increasing number of natural disasters around the world, with the students wanting to create a resourceful app. The prize included a six-month supply of chocolate, Netflix and Spotify!

To find out more about HackSoc, including the future events they have planned, visit **www.hacksocnotts.co.uk**.

Topping the app charts

23,412 x3

Left: Bricks - the team's first app
Above: The new Freshers week app, designed to improve student experience

The market for mobile apps is huge; there are more than 800,000 apps currently on sale. Getting your app the recognition it deserves is tough – but Nottingham students had no trouble.

Two of our third-year students have been celebrating the success of their mobile app which made it into the top 75 free puzzle apps in the Apple Store.

The puzzle, Bricks, which is available for purchase under the name of main designer Stephen Sowole, a Computer Science student, involves breaking different coloured bricks by redirecting a ball across the screen and gaining points in the process.

Stephen and his fellow students initially made the app for fun as they wanted to learn about and gain exposure to the app industry. They were amazed to see it receive 70 downloads in the first two hours and rise to 848 in 24 hours! On first release, the app was receiving approximately one download per minute.

The team of five students, from the school of Computer Science and Faculty of Engineering, took three months to produce the app and used school computers to design and create their product.

Building on the success of Bricks, Stephen and his team have released a second app, working with the University's Students Union. The UoNSU Welcome App is designed to maximise the student experience throughout freshers week, and has been greeted with positive reviews from new students.

The team are also looking to expand on their collection, whilst helping students out even more – they are currently working with Nottingham City Transport to release an app for the University's Hopper Buses. Watch this space!

"I've been waiting for a decent brick breaker game on the App Store for ages. Really well done love the design and this game is strangely addictive! 5/5"

Student opportunities – home and away

Undertaking a year in industry, or some time abroad, as part of your degree can provide you with a wealth of benefits that will help you in your future career.

A year in industry can equip you a range of skills highly sought after by employers, including gaining valuable experience in a workplace, a better understanding of how the knowledge learned at university relates to real life, increased independence and a more mature outlook. It can also give you an opportunity to make contacts and possibly secure a job for after graduation.

Some recent examples of where students went and the areas they worked in include:

- BT – software engineering
- Hewlett Packard – application support
- HSBC – systems analysis, development and testing
- IBM – software engineering and more
- Microsoft – software engineering

- NextJump
- Ocado – programming/analysis/optimization
- Oracle – programming
- Rolls-Royce Airlines – Java programming and more
- Thomson Reuters – quality engineering, programming

In addition to having courses that incorporate a year in industry, our links with universities across the globe mean we can offer a variety of study abroad placements. As well as enabling you to experience a different culture, studying abroad is an excellent opportunity to learn about different approaches to technology.

We now offer MSci Computer Science/with Artificial Intelligence including International Year, and BSc Computer Science/with Artificial Intelligence with Year in Industry. These additional years will be fully supported and assessed.
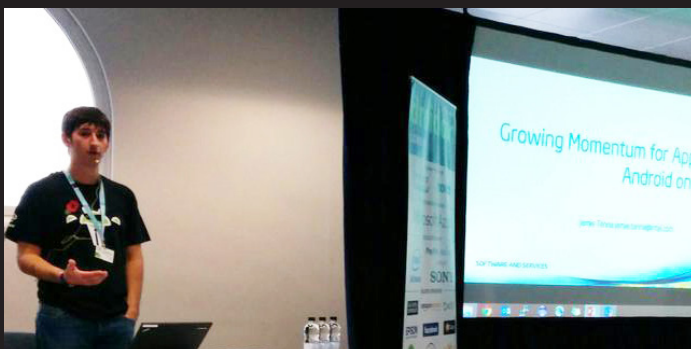
Two students that took a year out are Jamie Tanna, and Ali Jahanshahi – their stories are below.

Student profile

Name: Jamie Tanna
Year: Industrial placement
Company: Intel

"I attended the Computer Science careers fair to get an idea of what companies I could get a placement with, although this was really useful, I had a personal contact who put me in touch with Intel.

I feel that my time in industry has taught me about time management, so I know when I come to finish my final year I will have learnt how to juggle my time effectively!"

Above: James Tanner presenting 'Royal Baby Androids' at Intel.

Right: Ali (far right) seen with Stuart Manton, now Communications Consultant at ARUP, and Mark Hopkin, Software Engineer at BT, alongside Dr Gail Hopkins Senior tutor at Computer Science.

Student profile

Name: Ali Jahanshahi
Year: Industrial placement
Company: Rolls Royce

"I currently work in Supply Chain Strategy at Rolls Royce, where the aim is to reduce the cost of sourcing by tapping into low cost countries.

Although my job doesn't necessarily involve the fundamentals of Computer Science, the Analytical Skills that I have picked up by studying Computer Science at Nottingham has been incredible.

Perhaps the greatest things that I have learnt is how to break a big problem into tiny small problems, then making everything work together, which is essentially what programming is about in my opinion.

I cannot stress how important it is to mention that we are ranked very highly in the eyes of employers."

Vice-Chancellor awards

We were delighted to have been linked to two Vice-Chancellor Awards this year. The first was the IT Community Consultants Project, a project which offers Computer Science students the chance to get involved in community projects. The project which is an excellent opportunity to give students a taste of the world of work, after graduation. The project is jointly delivered by the Careers and Employability Service, Community Partnerships and the University's IS department.

Kathryn Wright who helps to coordinate the project says "this is an absolutely fantastic achievement and we are so proud and privileged that we get to be a part of this initiative. The students who take part get so much out of the project, as do the charities who benefit from the help that the students provide, it's a win-win situation".

Nottingham Elders' Forum (NEF) was one of the organisations to benefit from this year's consultants. Glenise Martin, NEF's Hon Secretary, said of the Project, "It has been excellent and we will benefit from it in many ways. In time saving, financially and helping keep us from tearing our hair out in frustration. The team were absolutely superb and so professional. We couldn't have had a better one if we'd paid a huge sum for their services" For more information about the project, please visit **www.nottingham. ac.uk/careers/itconsultants**.

Computer Science graduate Joe Nash also received the Vice-Chancellor's Achievement Award. This prize was awarded in recognition of Joe's achievements whilst studying with us; Joe has been involved in many activities which have had a positive impact for students, staff and the local community. As well as working to establish Hacksoc, Joe has organised events in the school, attended international competitions and has worked in local schools to promote computer science to the next generation. The school is proud to have had Joe's hard work recognised by the University and wish him every success for the future.

Joe receiving his award.

The team with the Vice Chancellor.

Course profile

Name: BSc Data Science
Course code: 1260
Duration: Three years

A brand new course for 2015, BSc Data Science is the result of a partnership between Computer Science and Mathematical Sciences, and is the first of its kind in the UK.

This new course covers topics unique to Nottingham on data capture, data mining, statistical analysis, machine learning and large-scale cloud computing, in combination with teaching an understanding of the human issues surrounding the analysis of personal data.

With combined teaching and research strengths from the Schools of Computer Science and Mathematical Sciences, you can expect to gain knowledge and the skills needed to present, analyse and ultimately understand large data sets.

Course content is split equally between mathematics and computer science modules, with an emphasis on statistical and computational data analysis methods, many the result of work in Artificial Intelligence. These are supported by a strong software development theme, providing the skills needed to both understand and apply key techniques.

Typical modules include Computer Fundamentals; Programming and Algorithms; Probability Models and Methods; Languages and Representation; and Statistical Inference.

The final-year project provides an opportunity to bring these skills together to address real data analysis problems in a rich and supportive environment.

To find out more about the course, or to further discuss entry requirements, please visit **www.nottingham.ac.uk/ugstudy/ courses/computerscience/bsc-data-science.**

Women in tech –
student conference

Women studying and working in the academic disciplines of science, technology, engineering, and mathematics (STEM) is a hot topic. With such a small amount of women pursuing careers in these fields, the profile of technological roles need to be raised, and barriers broken.

Third-year computer science student, Paula Clerkin, decided to tackle this head on and ran a careers event with a difference. InspireWIT was run at the university and was open to all; it gave attendees the opportunity to explore the vast, but impressive technology industry, and the career potential within it.

The morning consisted of six inspirational, yet relatable speakers, followed by an afternoon of informative workshops, which allowed the 200 attendees to find out more, speak to professionals in the field, and meet top sponsors within the industry.

There was even an array of retro game stations, including Wiis, Oculus' and a photo-booth.

The emphasis of the day 'was on taking your time, asking all your questions and most importantly, being inspired and having fun'. The event proved a huge success, and plans are already in place for InspireWIT 2015!

You can find out more about InspireWIT by reading Paula's online blog - **http://www.brightnetwork.co.uk/ blog/ women-technology-conference-difference**

Current computer science students volunteering at the event.

Lab updates

Over the last year, we have continued our mission to provide better facilities. Students asked for more space to undertake group work, and power points to use their own equipment. We ran with this suggestion and enlarged and completely renovated The Hub. All new furnishings were brought in, three new big screens and more floor-box power points added.

We've had a brand new lab added, and now we boast more space than ever.

Be sure to visit the new labs, The Hub, The Atrium and the pods available on the upper two floors.

Visiting us

If you haven't been able to visit us yet, there are still opportunities to come and see us. It's a great way for you to see the campus, our facilities and meet our staff and students.

For dates of our visit days, please see **www.nottingham.ac.uk/ugstudy/ visitingus/opendays**

For further information please contact the Computer Science Admissions Team:

School of Computer Science
The University of Nottingham
Jubilee Campus, Nottingham, NG8 1PH

t: +44 (0)115 846 6550
e: admissions@cs.nott.ac.uk
w: **www.nottingham.ac.uk/cs**

Undergraduate course information is available at **www.nottingham.ac.uk/ugstudy**

To request this information in an alternative format, please contact us:
t: +44 (0)115 951 4591
e: alternativeformats@nottingham.ac.uk