



Oxford
Computer Society

MICHAELMAS TERM 2011

HISTORY

ST JOHN'S COLLEGE MICROCOMPUTER SOCIETY (shortened, for obvious reasons, to Microsoc) was founded in 1978 to provide an environment for college members to discuss, use and build 'micro-computers.'

For many years, the society was the centre of all computer enthusiasts in the University. We had good relations with computer manufacturers, regular speakers, and access to numerous machines and facilities.

In 1995, the society changed its name to *Oxford University Computer Society*, which is what we anticipate our name to be next term. The emphasis shifted to the Internet.

Since then, the society has gone through numerous variations and incarnations, ending with a long hiatus in 2010 – 2011.

We are now trying to be reborn from our ashes.

Coming out from a period of inactivity is quite a challenge; we are trying to redefine the society as the hub of all social networking for people interested not only in computers *per se*, but also in the general Theory and Practice of Computation. We aspire to bring together both 'technologists' and 'theoreticians' in a productive union of creative powers, so as to get together, discuss, and form tight intellectual, industrial, and academic links.

THE COMMITTEE

| | | |
|----------------|--------------------|--|
| PRESIDENT | Ben Gazzard | ben.gazzard@stcatz.ox.ac.uk |
| VICE-PRESIDENT | Alex Kavvos | alex.kavvos@univ.ox.ac.uk |
| SECRETARY | Ian Jones | ian.jones@balliol.ox.ac.uk |
| TREASURER | Laurens Lemaire | laurens.lemaire@stcatz.ox.ac.uk |
| SENIOR MEMBER | Dominic Hargreaves | senior.member@ox.compsoc.net |

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LEARN TRADE TEACH

- + **QUANTITATIVE TRADING AT JANE STREET** WILL CHALLENGE YOUR SKILLS IN A DYNAMIC ENVIRONMENT THAT PRIZES THE DEVELOPMENT OF NEW IDEAS AND TRADING STRATEGIES.
- + **JOIN THE FIRM** FOR THE FASCINATING PROBLEMS, CASUAL ATMOSPHERE, AND HIGH INTELLECTUAL QUALITY. STAY FOR THE CLOSE-KNIT TEAM ENVIRONMENT, GENEROUS COMPENSATION, AND ENDLESS OPPORTUNITIES TO LEARN, TEACH, AND CREATE.
- + **NO FINANCE EXPERIENCE IS NECESSARY,** ONLY INTELLECTUAL CURIOSITY AND THE DESIRE TO LEARN.

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Come to our 2012 Careers Presentation to find out about a rewarding career in our Audit, Tax, Consulting, Corporate Finance and Technology areas. As one of the world's leading professional services firms, we offer a culture which demands, supports and rewards the highest performance, allows everyone the opportunity to shape their own career and provides an environment where training and development are genuinely first class. It's your future. How far will you take it?

| | |
|---------------|--|
| Event: | 2012 Careers Presentation – Oxford |
| Date: | 10th October 2011 |
| Location: | The Ballroom, Randolph Hotel, Beaumont Street, High Street, Oxford OX1 2LN |
| Time: | 6.30pm – 8.30pm |
| Registration: | www.deloitte.co.uk/graduates/events |

MICHAELMAS EVENTS

For more information on the time and the place of each event, please subscribe to our mailing list.

WEEK 1

Tue 11/10 FRESHERS' DRINKS

Come along to our first social, where we can meet each other, talk, and exchange ideas; refreshments will be provided.

WEEK 2

Tue 18/10 COREFILING: MACHINE LEARNING

Old committee member and Ex-Magdalen Computer Scientist, David North, will fill the story in on Machine Learning for us.

Sat 22/10 SOCIAL: FILM SCREENING

We will probably be screening a film. Refreshments will be provided.

WEEK 3

Wed 26/10 NETCRAFT: DEFENCE AGAINST THE DARK ARTS

Phishing, hacking and Internet based fraud are growing very quickly, not only in absolute numbers, but also in diversity and complexity. We review contemporary Internet bank robbing, illustrating the scale of the activity, the technological arms race between attackers and defenders, some recent innovations, and mistakes from each side.

WEEK 4

Tue 01/11 BANK OF AMERICA MERILL LYNCH: DINNER & DRINKS

This event is only open to members.

Recent Oxford graduates and senior executives from the Technology division will discuss their experiences: from what a typical day involves, to careers paths on offer, and the application process. Please RSVP by Monday of Week 3 if you wish to attend the dinner, but — if you forget to — you're welcome to drinks anyway.

Thu 03/11 LIGHTNING TALKS
Have you an interesting idea you want to share with a technologically-minded audience, pertaining to computers in general? Test whether you can get your message across in only 5 minutes! Data projectors will be provided. *We do welcome surprise contributions, but it would be lovely if you informed us beforehand regarding your wish to take part.*

WEEK 5

Wed 09/11 THE BEAUTY OF BOOTSTRAPPING AND THE JOY OF JIT
Dr Michael Spivey, Oxford University Department of Computer Science
“A compiler written in its own input language that generates code for a non-existent machine? Surely that’s hopelessly impractical! I will talk about my recent experiences in improving GeomLab, a simple functional language, by using a bootstrapped compiler to generate code for the Java Virtual Machine. Good results are surprisingly easy to obtain.”

WEEK 6

Wed 16/11 NETCRAFT: VULNERABILITY BINGO
The Bath-based company makes a return to show us what computer security entails, in practice.

Sat 19/11 SOCIAL
The plan is to go bowling this time.

WEEK 7

Thu 24/11 DELOITTE
Deloitte provide audit, consulting, financial advisory, risk management and tax services to selected clients. Their Technology Practice addresses numerous advancements, such as cloud computing, mobility, data analytics and social media, through the prism of new market creation.

WEEK 8

Thu 01/12 TERMLY GENERAL MEETING
Refreshments will be provided.

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Graduate Software Developer

Gloucester Research is a rapidly growing financial research and technology company based in Central London. We have developed and operate a sophisticated, bespoke research platform to leverage investment knowledge in a systematic way. Our software systems and trade settlement services are used for trading in markets around the globe and around the clock.

The firm views software development as part of its core business strategy and has specific software teams to work on/deal with/each need of the business – they differ in their responsibilities but they share a common culture and similar technical requirements:

- Enhancing and supporting the existing trade technology platform and associated toolset.
- Designing and implementing high quality code to work with large data sets.
- Responding to the changing requirements of the business.

Being a small company, but one that develops and supports a sophisticated financial market trading platform, means that the role will provide the best of both worlds to someone who would like to pursue a career in financial IT but doesn't want to be restricted to a narrowly-defined role in a big stuffy company.

The roles are all technically challenging, and require an ability to rapidly adapt to new technologies such that the business's technology advantage is maintained. A candidate must be a strong, competent, and practical software developer. They should be enthusiastic and have a genuine interest in both software technology and the underlying hardware. Applicants must have or be expecting a First in their degree and strong A-levels.

Please send CV's to graduates@gresearch.co.uk by 6th December.

WE THINK
INNOVATIVE CODE
IS MORE IMPORTANT
THAN DRESS CODE



BOOK DISCUSSION GROUP

Our vice-president, Alex, has proposed that we run a *Book Discussion Group* this year (subject to sufficient declarations of interest), and is willing to run it. The group would be available to members, and would meet weekly. But let Alex's proposal, the full text of which you can find online, speak for him:

Like many facets of the contemporary Information Age we seem to be living in, the Oxford experience really has a bit of everything, save one thing.

People – *especially the technologically-minded science students amongst us* – do not seem to be reading books anymore.

People do not find the time, or the incentive, to read.

Most of us grew up in that spirit. The change had already started when the television got into every home; but the real deal came with Wikipedia, and, since then, we have all settled numerous times for fast, quick-and-dirty, fragmentary and badly sourced knowledge.

I believe it is high time we attempted the opposite.

Hence, I propose that we found a Book Discussion Group (look the definition up in Wikipedia). We are a largely technologically-minded society, but some of us are also interested in Computer Science and related mathematics. However, regardless of background, everyone is welcome to participate.

An initial list of possibilities, which includes the Pulitzer-winning "*Gödel, Escher, Bach: an Eternal Golden Braid*," the beginners' classic programming text "*Structure and Interpretation of Computer Programs*," Stephen Wolfram's notorious "*A New Kind of Science*," and Andrew Hodges' biography of Alan Turing, can be found on his complete proposal, available on our website.

Please e-mail Alex directly to express your interest and/or suggest a book (see LINKS & CONTACTS section of this termcard).

The time and the venue of meetings will be decided collectively.

TECHNOLOGY COMPETITION

This year, the CompSoc will be running a *weekly technology competition*.

Each week, we will set a challenge, hopefully covering a broad range of task difficulty levels, and exploring all sorts of technological themes.

The main aim of each challenge will be to obtain some phrase or value, which can be used to complete a Uniform Resource Locator (URL). Upon visiting the document at the Locator, a personal timer will be stopped.

We will also be sending out more details about how to join the competition through our mailing list.

We have to thank Metaswitch, whose sponsorship enables us to offer a £5 prize each week, and a larger prize to the three most successful participants, at the end of each term.



Participation is free for members; for non-members, the price is becoming a member!

Finally, if you have any novel ideas for a challenge, please share your thoughts with us – contact president@ox.compsoc.net. We have a few ideas, but we are always keen to hear more.

A WORDSEARCH!

Here is a newspaper classic:

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| M | N | I | M | J | M | J | C | U | W | Y | W | I | H | R | A | L | U | N | O | F |
| U | N | C | I | P | H | M | M | A | J | U | W | Y | C | O | M | P | U | T | E | R |
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Can you locate the following words?

COMPSOC

OXFORD

COMPUTER

PIZZA

PROGRAMMING

MICROSOC

UNIX

INTERFACE

INTERNET

COMPUTER

HARDWARE

CARD

PLANS FOR THE FUTURE

We hope to be eligible to call ourselves the OXFORD UNIVERSITY COMPUTER SOCIETY by the start of Hilary 2012.

We plan to invite a lot more academics, with a view to getting a holistic and pragmatic view of cutting edge research, both in Oxford and in the UK.

We plan to reach for a wider membership, including Graduate and Doctoral Students. The idea is to form a tight network of people interested in the field of Computing in general.

MEMBERSHIP COSTS

Current membership fees stand at

| | |
|-----------------|-----------------|
| Life Membership | Year Membership |
| £5 | £3 |

Should you be reading this while *not* considering joining, please bear in mind that our membership fees match most other societies' 'Freshers' rates', and beat their regular rates, hands down.

LINKS & CONTACTS

We are all available at `<committee-position>@ox.compsoc.net`.

| | |
|-------------------|--|
| Website | <code>http://www.compsoc.net</code> |
| General Queries | <code>committee@ox.compsoc.net</code> |
| Book Club Contact | <code>alex.kavvos@univ.ox.ac.uk</code> |

To be informed of all our events, subscribe to the compsoc-announce mailing list, by sending an e-mail to `compsoc-announce-request@lists.ox.compsoc.net` with 'subscribe' in the subject line.

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Netcraft is an Internet services company based in Bath which provides internet data analysis, defences against fraud and phishing, web application security testing, and automated penetration testing. In particular, Netcraft's anti-phishing services are very widely licensed, ultimately protecting hundreds of millions of people.

Clients include many of the world's leading internet infrastructure and financial companies.

Job Opportunities at Netcraft

Netcraft is keen to receive applications from high performing students for:

- Business Development
- Analyst
- and Software Development roles.

These represent well-paid opportunities to join in with the sales, strategy, marketing, analysis, and development of Netcraft's innovative and commercially successful network exploration and security services.

Graduates, Industrial Years, or Summer Placements

We offer industrial years, summer placements, and graduate opportunities for all roles.

Disciplines Required

Expected 1st class degree in any discipline.

Software Development roles require Computer Science or near equivalent experience.

Applicants should have a keen interest and grasp of a broad range of internet technology.

Making Contact

Send a CV and covering letter to cv@netcraft.com

More information can be found at <http://www.netcraft.com/jobs>.

Netcraft Ltd, 2 Belmont, Bath, BA1 5DZ, United Kingdom
Tel: +44 1225 587500 cv@netcraft.com <http://www.netcraft.com>

