



Wish list

Who's on your top ten for IT jobs? Does the list look anything like this?

- 1) IBM
- 2) Google
- 3) Microsoft Ltd
- 4) BT
- 5) HP/Hewlett-Packard
- 6) Intel
- 7) Dell
- 8) Accenture
- 9) Cisco Systems
- 10) Fujitsu Services.

Well, you and a thousand others: that's the top ten employers as established in a survey of IT students from Target Jobs (www.targetjobs.co.uk). Classy work experience and internships put IBM top.

Full speed ahead...

... for these teams: Dundee University mechanical engineering students have driven off with three years of sponsorship from the Scottish motoring dealership John Clark Group for their entry to the Formula Drive competition, where they'll have to build and test a Formula-style racing car. That's on top of the bouncy cushion of three years' sponsorship from Michelin. They'll be racing the car at Silverstone in July this year.

www.drive.dundee.ac.uk and www.formulastudent.co.uk



Meanwhile, UCL students have gone the other way, and took their SolarFox sun-powered car to 11th place (out of 39) in the Panasonic World Solar Challenge, racing for 3000 baking kilometres right across Australia. The SolarFox team from the Department of Mechanical Engineering designed the fibreglass shell, built the chassis and suspension, and stuck on the 402 solar cells (producing 1300 Watts in bright sunlight, giving them up to 120km/hr.) www.teamsolarfox.com

The state we're in

Read about the state of your industry in Engineering 2007 – the Engineering and Technology Board (ETB)'s annual report to the nation on, ultimately, why there aren't enough engineers, why people don't know enough about the subject, and what we've got to do about it.

On the way you'll also find out how many FTSE 100 companies are run by engineers (a whopping three out of ten, outnumbering accountants in some tests. We cannot possibly comment.) On the other hand, just pages later you'll learn that 61% of 16-19-year-olds in the UK now know "very little" about engineering. Dire.

www.etechnology.co.uk/_db/_documents/EngUK07.pdf

Leading article

Wiley-Blackwell is launching a new journal, Sports Technology, this month. Alongside new research there will be opinion pieces from leading sportsmen and women, plus a results service: roll on the Olympics. The first edition looks at tennis and golf ball aerodynamics, running shoes and shock absorption in artificial turf. Read Student & Young Professional's predictions for the future of the field in our leading article, "The New Sports Professionals".

www.wiley.com



On your bike

Leeds University student Dima Damen has created a system which allows CCTV cameras to point out bicycle thieves – by getting them to recognise colour differences in the images of the person locking the bike up and the person cutting it free. (It's a great idea: more than **half a million** bikes are stolen annually in the UK, only 5% ever come back, and with rising oil prices we'll all be on our bikes soon. It also means the bloke in the CCTV monitoring suite can go back to his newspaper.) Dima, a PhD student in the engineering department at Leeds, is now working on getting the cameras to flag up people who leave suspicious bits of baggage lying around airports.

Feel the power

Tremble at the stats: HECToR, the UK's most advanced supercomputer has just switched on at the University of Edinburgh, representing 12,000 desktops, capable of 63 million million calculations a second (that's everyone on earth doing 10,000 calculations in a second at the same time, which, unbelievably, includes all the babies and reality TV contestants). HECToR, or High-End Computing Terascale Resources, is a Cray

XT4 and will be looking at climate change, ocean currents, the next pandemic and the Times crossword. Before breakfast.

Another top ten

Quick, close your eyes and think of the ten materials breakthroughs that are shaping the world today. Got lost at around four? Never mind, Materials Today has handily written them down for you:

1. the International Technology Roadmap for Semiconductors (ITRS)
2. scanning probe microscopes
3. giant magnetoresistive effect
4. semiconductor lasers and light-emitting diodes
5. national Nanotechnology Initiative
6. carbon fibre reinforced plastics
7. materials for Li ion batteries
8. carbon nanotubes
9. soft lithography
10. metamaterials.

Now, what's a shopping list doing at the top, you may ask? "The ITRS drives the incredible progress of the microelectronics industry by setting out goals for innovation and technology needs. A mixture of science, technology, and economics, it is hard to see how the ITRS could do better in driving forward advances in this area," it says here. Find out how they justify the rest on www.materialstoday.com



Fun and games

Find out what they're up to in the computing department at Warwick by checking out this: www.warwick.ac.uk/go/sudoku

They've given Sudoku another layer to ponder by adding colours, part of their empirical modelling research and student Antony Harfield's PhD, which aim to look at how humans experience the world, reason, and act – and how software (as in railway safety systems, for example) can best take account of this. So they weren't just having an extended tea break, then.

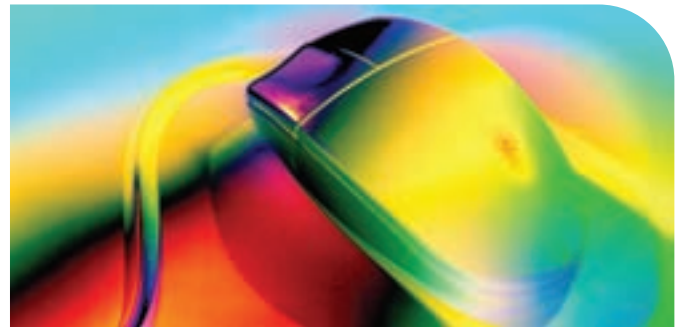
North East nous

Women business directors and academics are mentoring students at Newcastle University Business School following research from the department which shows that women are "massively under-represented" in science, technology and innovation businesses.

The new role models, who include Jane Atkinson, Assistant

www.theiet.org/students

Vice-President and General Manager, SembCorp Utilities (which provides industrial utilities and services in the North East of England), Sarah Stewart, Director of Newcastle Science City (a new hub for science and technology companies) and Fiona Cruickshank, Managing Director of Northumberland pharmaceuticals manufacturer Specials Lab, will be offering advice, guidance and mentoring. www.ncl.ac.uk/nubs/about/



Job surfing

Check out new careers website www.iwant2be.org.uk for advice on engineering in the North East of England. The site claims to map out all the courses offered by colleges and universities in the region, enabling young students, or people looking to change career, to see a clear path to their goal.

Or try www.bright-futures.org.uk/, a networking careers site which signs up students and corporates and gives them a chance to have a chat. Engineers and scientists make up more than a quarter of its members, so you won't be standing in the corner talking to the aspidistra.

Looking for flexible working? Or even someone to share a job with? Tricky questions to ask in the SET sectors, where part-time working is seen as a barrier to success. Try www.jobshare-uk.com, a free site from the UK Resource Centre for Women in Science, Engineering and Technology (UKRC). It offers case studies and information on flexible working, as well as a job search database. Looks like it's in its infancy, but someone has to go first, and there's interesting stuff to read on equality, pay and recruitment in the SET field on the resources page.

IT is in

The highest numbers of computer science students since the dotcom crash are currently studying at Southampton University. It is "very good news for the industry", according to senior admissions tutor at Southampton Dr Paul Garratt, as it "signals a renewed interest in mathematics and physics and an endorsement of computer science as a route to lucrative careers such as management consultancy, finance and IT".

Write stuff

How are technology and engineering driving change? If you can answer in a way that catches the eye of judges at the Independent-Bosch Technology Horizons Award 2008 (and you're under 24 and can get the thing off to them by March 31) then you could win £1000. And get it printed. Not bad for a bit of blue sky thinking. www.independent.co.uk/technologyhorizons