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The compute-ability IT career competition is back

Can you answer Computer Science questions on subjects as diverse as logic and interactive art...and program creatively to boot? BrainAcademy, the online Computer Science talent spotting competition, is back...and the winner will do just that. The competition is run by Queen Mary, University of London and sponsored by Microsoft. Up for grabs are a range of career boosting prizes tailored to the winners' experiences and interests.

The competition involves completing an online quiz to qualify for the second round programming challenge on computers and emotion. The final stage for the top entrants is a tough interview. This year BrainAcademy explores the diversity inherent in computer science. Questions highlight how women and men from various cultures played a part in the history of computing.

The competition is free to enter; anyone can test his or her knowledge and skills. For the dedicated, serious prizes are available: for example an undergraduate degree place with fees paid, together with career enhancing plug-ins. In addition to software prizes, Microsoft is offering a guaranteed interview for its student internship and graduate recruitment programmes: giving successful entrants the chance to win a place at Microsoft. Top internet publishers ZDNet are also offering a summer work experience prize.

This year the competition has been expanded to include prizes for graduates, including Masters bursaries on courses such as Intelligent Web Technologies and Intelligent Imaging Systems. There is also a Conversion Masters prize suitable for someone from a non-computer science background looking for a career change.

BrainAcademy was first launched in 2003, when it received over 80,000 hits, with 120 hopefuls completing the programming challenge, and a handful making it to the final interviews. The 2003 winner, Adam Kramer, then 17, from North London has just finished the first year of his Degree prize. We asked Adam about his experiences in the competition and beyond:

How did you learn to program?

I was chatting with my Maths teacher, Bernie Westacotte, on the coach back from a sports day and he asked if I'd tried programming. I hadn't, so back in school he showed me a few things in BASIC – I then taught myself from the internet and books. From BASIC, I progressed to C, C++ and Java.

What was your winning BrainAcademy program?

It was an AI simulation program. I had to create a system in which you could design creatures and an environment for them to live in. You could also take control over individual creatures and manipulate them – act like God.

What advice do you have for this year's entrant?

Go beyond what is asked so you stand out. Be creative and imaginative. Don't leave it to the last minute. Think and plan what you will do before you start – it's easier to add at the start than change at the end. Aim to finish well before the deadline. That way you give yourself time to reflect on what you've done so you have a chance to improve from ideas that come from that.

Has winning helped you?

Yes, obviously, though not just in the prize. It's allowed me to stand out and be recognised a little, which is nice. It's also given me something to live up to which forces me to work that little bit harder.

You took part in the BCS programming competition too – so, you enjoy programming competitions?

Yes. The BCS competition was different though. It was a team event rather than individual and we were also under time pressure – 4 or 5 hours rather than having the whole summer.

Is there anyone famous who inspires you?

I'm inspired by entrepreneurs who started from nothing – like Richard Branson – he's showed that if you have a good idea you can go from nothing to everything.

What has your first year at University been like?

The subject was a lot broader than I expected, though the diversity is what I like about it. I like the way it can be applied to anything – not just the computer applications but the logic and mathematics behind it too. You can progress into different fields – it doesn't tie you down. Once you have developed a logical mind you can then step into other areas. I would really like to specialise in Bio-informatics – maybe do an advanced Masters in that area. I did a lot of biology at school and that mixture of biology and computing is really exciting. I've learned a bit about GRID computing which gives a way to attack big problems to do with drug design that otherwise might not be possible, just using idle computing power. It's worthwhile and there are lots of commercial opportunities.

Some computer science degrees include modules in entrepreneurship, is that important?

I worked before so have some idea of how it works, but if it goes beyond the basics that would be really useful to me.

What jobs have you done?

I've done several IT jobs in between studying – at a hotel in Knightsbridge looking after their systems, an accountancy firm and for a theatre company. The theatre company work was for a one-man show called "An Audience with the Mafia" – with lots of lighting, sound and projections. We performed at the Edinburgh festival, which was really interesting.

Has the experience from working helped in your studies?

It has expanded my experience a lot. I learnt a lot of things that I could apply in the course so it's made life easier. The Computers and Society module had lots of things about industry and legal issues that complemented what I had picked up at work. I've got a deeper understanding, not just for exams but a rounder picture.

Would you recommend a Computer Science degree?

Definitely – even for someone with lots of experience in industry. I knew a lot of the technical side before hand but I've got a much clearer overall picture already. It's helped me slot things into place. The whole University experience away from the study side is worth doing too. I would say try it and see!

To enter the competition visit <http://www.brainacademy.qmul.ac.uk/>