

Visions and Challenges



Alan Turing (in 1950)

"I believe that in about 50 years time it will be possible to program computers, with a storage capacity of about 10^9 , to make them play the imitation game [in which a computer pretends to be a human] so well that an average interrogator will not have more than 70 per cent chance of making the right identification after five minutes of questioning." [This is a version of the so-called Turing Test.]



Joseph Licklider (in 1960)

"The hope is that, in not too many years, human brains and computing machines will be coupled together very tightly, and that the resulting partnership will think as no human brain has ever thought ..."



Edsger Dijkstra (in 1972)

"In their capacity as a tool, computers will be but a ripple on the surface of our culture. In their capacity as intellectual challenge, they are without precedent in the cultural history of mankind."



Sherry Turkle and Seymour Papert (in 1992)

"The computer is an expressive medium that different people can make their own in their own way." [Emphasis in original]

These quotations (mostly by famous computing pioneers) refer to visions and challenges for computing which we can recognise, but which are still a long way from being realised in spite of the extraordinary technological advances of recent decades. But technology is not the same as ideas. Making things, and making things work, is not the same as having the imagination to think of the things and the way they might work. Computing has a lot to do with both thinking and making. If you can see your future in computing, come to Computing Your Future at Warwick on the 16th March and be inspired!

The conference has been organised by the Department of Computer Science, University of Warwick, with substantial support from Warwick Manufacturing Group and Coventry University (Computer Science).

THE UNIVERSITY OF
WARWICK

WMG
Innovative Solutions

Coventry
University

We are grateful for generous support for this event from:

COMPUTING AT SCHOOL
EDUCATE · ENGAGE · ENCOURAGE

BCS

IET
Collective Inspiration

Computing your Future An Invitation ...



University of Warwick
16th March 2011

What's happening?

It's a conference primarily for 6th formers interested in following a degree course in a computing-related subject (for example, Computer science, Computer and Business studies, Creative Computing etc.).

The conference offers **information, inspiration** and **investigation**.

The purpose is to give good up-to-date information on both degree courses and the career paths that can follow on from those degrees. We shall offer inspiration from the front line in current research on the remarkable computer-driven revolution that is now a part of everyone's life. We shall also investigate, with the help of experts, some of the most exciting areas of state-of-the-art computing - both practical and theoretical.

10.00-10.30 Arrival in Department of Computer Science

10.45 *Computing Your Future*

Professor Stephen Jarvis (Warwick University)

11.00 Interactive Team Quiz

Speed, surprise and suspense

11.15 *Sufficiently Advanced Technology*

Dr James Shuttleworth (Coventry University)

11.30 Introduction to Workshops (see page opposite)

11.45 Workshops 1 and 2

13.00 Lunch and networking

13.45 Workshop 3

14.30 *A Question of Overhang*

Professor Mike Paterson

14.55 Competition News

15.00 *Infrastructure at Google*

Dr Peter Dickman

15.30 Departure

We look forward to welcoming you on the 16th March and hope you will find the day interesting, informative and fun.

What are the Workshops?

These go into some detail about degrees and careers and some key current challenges for computing. So there are three kinds of workshop (see below) and everyone will go to one of each kind. Where possible the presenters will include some kind of interactive activity and will always welcome your questions!

The **Day in the Life of...** will be ones about careers like a Software Developer, Video Games Programmer, Technology Consultant, and will show you what it could be like doing those kinds of jobs.

The **Hot Topics** will be ones like: Advances in Visualisation, Graphics for Mobiles, Constructivist Computing, Haptic interaction, Computational Biology

The **Degrees for You** workshops will be given by lecturers and students from Warwick and Coventry universities describing a wide range of courses and showing some of the work they have done for projects. They will give help on how best to match up your interests and qualifications with degree courses that are available in the UK.

Look out for the link to *Computing Your Future* from the front page of the website for the Department of Computer Science at the University of Warwick : <http://www.dcs.warwick.ac.uk>

Your school or college group must be accompanied by a teacher who will register your group online and will form you into teams before the day itself for entering the Interactive Quiz.

Questions still? If you have received this leaflet, and would like to attend, but are not sure who the contact teacher is at your school, or if you have any other questions, send email to CASconference@dcs.warwick.ac.uk