Computer Science

Driving Entrepreneurship

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Introduction

- CPHC – 700 members in the UK, from over 100 universities
- April 2014 published a report into the role of university computing departments in promoting and supporting entrepreneurship
Motivation – improve perceptions of CS discipline

To counter recent negative public discourse, such as

• Big public sector IT projects fail
• Employers don’t get the graduates they need
• Couldn’t vendor MOOCs replace CS degrees?
• Unemployment rates of CS grads higher than other subjects
Graduate unemployment

• Destinations of Leavers in Higher Education – published Summer 2014 – for summer 2013 graduates
• Overall graduate unemployment rate 7.6%
• Computer science graduate unemployment rate 13%
Not the only story.....employment

• Graduate employment rate in Maths 46.9%
• Graduate employment rate in CS is much higher at 67%
• The figure quoted includes employed AND in further study
• ONLY 10% of CS graduates go on to further study
Still not the only story...

• CS graduate unemployment rates after 3.5 years (the follow up data collection point) is **5.8%**
• which is the same figure as Engineering & Technology
• while medicine and dentistry is 5.5%

Source
https://www.hesa.ac.uk/index.php?option=com_pubs&Itemid=&task=show_year&pubId=1714&versionId=54&yearId=292
And other good news....

• Headlines in newspapers in the UK citing CS graduates as the highest paid -
The process

• Enterprise and Entrepreneurship in Computing Curricula resources (2013 workshop) as starting point
• Survey – of all CS departments
• Desk-based research into entrepreneurship as surfacing from websites/ external promotional material
The findings...

• A diverse range of models found
• Student-led
• Staff-led
• Resources included incubator labs
• Embedded in curriculum
• ...or not
Case study 1: Student IT consultants

• University of Kent
• Kent IT Consultancy
• Support from industry
• Gives students practical experience
• Serves the needs of local business – SMEs in particular
Case Study 2: Technology spin-outs

• Queen’s University
• Analytics Engines
• Support from venture capitalist
• Grant for secondment - CTO
• Also placement on courses
The report

New Report on Driving Entrepreneurship Published

A new CPHC report, written by Dr Peter Norrington, has been published.

Computer Science: Driving Entrepreneurship

This report presents the findings of a snapshot review to highlight spin-out and student-based models for entrepreneurship throughout computer science departments in the UK, showing how computer science can create jobs and growth. The report was undertaken with a view to celebrating the contribution of computer science to economic growth. It can also be used to generate and source ideas where institutions are considering how this might work in their departments.

Data – the difficulty with it

• The dearth of public data on entrepreneurship and computer science, relating to course uptake and graduate destinations.

• Collated data on computer science start-ups and spin-offs, whether led by staff or students, is not available.

• UCAS course search only uses the course title, not the course summary or any of the deeper information on modules.
Impact - REF

• Later this year the Research Excellent Framework is published
• More good news stories will emerge
Conclusion

• CPHC is promoting the computer science discipline
• Improving the nature of the discourse
• Recognising the value of entrepreneurship is one way of doing this
Thank you!