

Computer Science Newsletter

News from the Computer Science Department @ UCT – 2009



Research News

The department has many research projects funded by both government and the private sector. Combined, these projects represent an annual income to the Department of 2,8m Rand:

- Digital Libraries
- Wireless Networks
- Mesh Networks
- Digital Storytelling
- Mobile Interaction Design
- Computer Graphics
- Sensor Networks
- Information Management
- Cluster Computing
- Molecular Visualisation

Contact Us

Telephone: 021 650 2663
Fax: 021 689 9465
Email: dept@cs.uct.ac.za
Web: www.cs.uct.ac.za



BCS Accreditation for Degree

From this year, graduates from the Department will have their degrees recognised by the British Computer Society. In essence, the BCS acts as an international quality assessor of computer science degrees and are happy to attest that the computer science degree from UCT meets that international standard.



The consequence for our graduates are twofold. Firstly, they have more leverage when seeking international employment as the quality of their qualification does not need to be validated by the employer – the BCS has, in effect, done this already. Secondly, graduates are able to use the title 'CITP' (Certified IT Professional) after their name to show that they have undergone professional training in their degree programme – in the same way as a chartered accountant would use 'CA' to denote a professional qualification.

New ICT4D Research Centre

As a computer science department based in South Africa, we work in environments where there is both a high technology density and a very low technology density. Over the years our research has ranged from working in the Centre for High Performance Computing (containing the fastest computer on the continent) through to building systems for trackers in the Kalahari. It is this latter category of research – bringing ICT solutions to technologically impoverished regions – that the new Centre will explore further.



We have already established an international reputation in this fledgling field (known as ICT4D – ICT for Development) and are now formalising this work under the umbrella of a research centre dedicated to ICT4D research. This centre will be highly multi-disciplinary and draw researchers from various departments throughout the university.

African PhD Bursaries from Hasso Plattner Institute

As part of the ICT4D centre, the Hasso Plattner Institute (HPI) in Potsdam, Germany, is sponsoring PhD bursaries for students within the African continent who wish to study an ICT4D-related topic within the department. There will be three such bursaries awarded and the first students will be starting in early 2009.



Microsoft Sponsor Games Courses

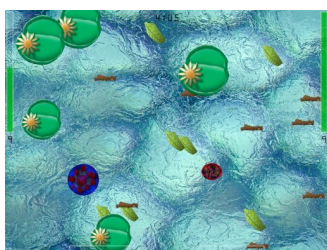
As part of the department's new game courses, students will have the opportunity to develop and test games for the Xbox 360 platform. The department was fortunate to secure a donation from Microsoft of several Xboxes which will be used to execute games developed via the XNA platform.



Global Game Jam

UCT hosted the Cape Town leg of the Global Game Jam from 30 January - 1 February.

There were 3 teams and the games they submitted can be browsed and downloaded from the Global Game Jam website – go to the games browser tab at the top of the page and filter out selections for Cape Town. The teams had approx. 44 hours to design and code up a game – and what they came up with was impressive given those constraints. The downloads are large though (several 100 MBs – which is fine for our overseas friends, but a problem for people here). Each time zone had a special theme and this was only revealed (along with other game constraints on play length, etc.) when the event started. The idea is to have people download games, play them, and then rate them. There was no "prize" as such.



The South African event was organized by The African Graphics Association (Afrigraph) and sponsored by the Computer Science Department, Afrigraph, Wisdom Games and Gamer Gear.

Postgraduate Student Focus - Isaac Olusegun Osunmakinde

Isaac is completing his PhD within the Department. He joined us as a research student from the University of Stellenbosch and we have witnessed his enthusiasm and growth as an Engineer of Intelligent Systems. By building on a first class for a Bachelors degree and a M.Sc. in Computer Science, he is currently researching in the area of Computational Intelligent Systems. He is a member of the IEEE Computational Intelligence Society and has authored over 10 refereed academic articles in prestigious journals and conferences. His recent list of publications include two papers which have been accepted to the ICANNGA09 Conference in April 2009 in Finland.



Team Investigates Future of Metropolitan Area Networks

A group of research students under the supervision of Professor Pieter Kritzinger have been studying wireless networks and the effect of scheduling, connection admission control and channel errors on the Quality of Service of vertically integrated wireless metropolitan area networks. This work is being done in collaboration with the Software Engineering Laboratory headed by Professor Giuseppe Iazeolla of the University of Rome. Professor Iazeolla has visited and lectured at UCT and a student from UCT has been working in Rome on the problem.
