



Trinity College Dublin

Trinity Research and Innovation is the first point of contact for companies seeking to find opportunities to collaborate with leading research groups in Trinity College Dublin.

Trinity Research & Innovation promote and manage the interaction between TCD researchers, funding agencies and industry. It is also responsible for managing TCD's Intellectual Property, Technology Transfer and Innovation, Commercialisation and Entrepreneurship.

On the evening of Thursday November 6th, we will be showcasing the latest exciting technologies developed by TCD researchers in Information and Communication Technology. The format will be open demos, so no more Death by powerpoint but rather hands on demos located in the rather cool and funky Science Gallery with refreshments served to fuel the interaction.

<http://www.tcd.ie/research/>



Where?
Science Gallery, Trinity College, Pearse Street, Dublin 2. (see above)

When?
November 6th 2008

What time?
7.30pm until late

Contact details:
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*Due to a limited number of places,
please register your attendance
before 23rd October at
[www.trinityopendemo.net/
register.php](http://www.trinityopendemo.net/register.php)*

Trinity Research & Innovation

Open Demonstration

November 6th 2008 7:30PM

1—Empower The User

Enabling next generation eLearning & Simulation

No two people learn in exactly the same way. They bring to the learning experience different goals, objectives, preferences, skills, competencies, motivations and contexts. So why do eLearning providers keep pushing the “one size fits all” learning paradigm? Can you imagine what it would be like if all of your learning experiences were specifically developed and presented “Just for You”; informed by your goals and objectives, sensitive to your preferences, aware of your current skills and competencies, influenced by your motivations and responsive to your current context? Empower the User is pioneering the way with technologies and tools to support the end to end processes of personalised eLearning and Simulation.

2—CITU

Automatic Image Annotation

Human annotation of images in laboratories or a large body of work in an art gallery is tedious and slow. By combining the skill of world leaders in language analysis and experts in image analysis CITU manages to automate the process of annotating or indexing images. The CITU system has been under development at Trinity College as a collaborative effort between the School of Computer Science, the School of Medicine and St James Hospital.

3—IRIS

Implementing Radio in Software

IRIS is a platform independent rapid-prototyping and communications implementation system for next-generation wireless and wired networks. IRIS significantly reduces development time and time to market.

4—Peerhosting

Wholesale Hosting Exchange

A market based system and enabling platform for the trading of web and software appliance hosting capacity among hosting providers. It solves the problem of infrastructure provision and management for high QOS hosting across organizational boundaries. Web and Application Hosting provision is a difficult task in which matching infrastructural capacity to varying consumer and end-user demand is costly and inefficient. Peerhosting delivers an evolution in web hosting infrastructure that offers cost reduction and increased QOS for Hosting Providers (HP) in the context of a new and controlled financial market for hosting capacity. The Peerhosting marketplace portal enables member HPs to trade hosting capacity in real time, making possible the productive deployment of excess hosting capacity, and the efficient purchase of capacity for infrastructural deficits.

5—Sophie

p2p web search

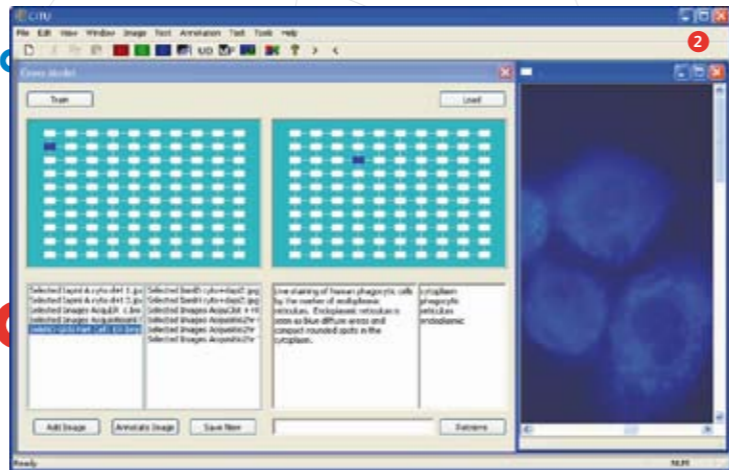
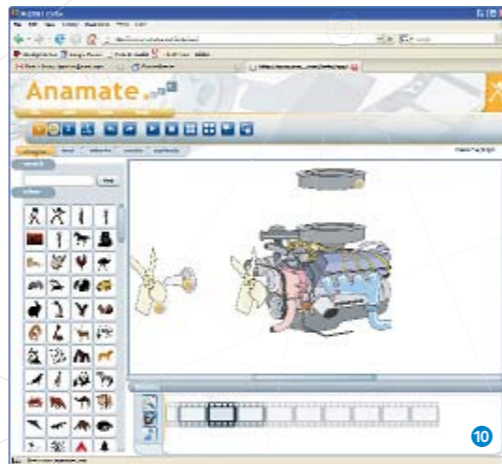
Existing web search technology is struggling with the incredible growth of the web, with mainstream page ranking solutions rapidly becoming

unworkable. However, the development of alternative ranking schemes that depend either on semantic analysis of page content, or human assessment of page value, suffer from problems of scalability. Sophie deploys a new technique, based on decentralized and non-invasive trust computation, which ranks result sets according to collaborative human assessment of page value, but without the need for explicit human intervention. This is a highly scalable solution, suitable for specialized, enterprise and general search.

6—Mesh TV

High-Bandwidth Peer-to-Peer Live Streaming for Internet Television

Traditional approaches to Internet TV are centralised and do not scale due to the large bandwidth requirements placed upon the content transmitter. MeshTV is a peer-to-peer (P2P) Internet TV broadcasting system that enables the cost-efficient delivery (streaming) of live video content to a large number of viewers. MeshTV adopts a novel P2P approach where the transmitter sends the content to a small set of computers (viewers) on the Internet; these computers then replicate the content to other computers, and so on; thereby distributing the bandwidth requirements across all participating computers. MeshTV can be used by TV broadcasters to provide high-definition live broadcast transmissions over the Internet.



7—Metakall

Pay-as-you-go electronic payment architecture

Most WiFi hotspots today are closed and require a monthly subscription or a costly day pass to obtain access to the Internet. Metakall on the other hand is a low-cost pay-as-you-go electronic payment architecture for next generation mobile networks which pays the network operator for small access periods (e.g. a few minutes). It allows a user to access Internet services through any Metakall affiliated Wireless ISP (WISP) using a patented pending Zero Interaction Authentication (ZIA) mechanism which is ideal for small form factor devices such as smartphones. The system is not dependent on the underlying radio technology and an easily migrate to WiMAX when it becomes more mainstream.

8—TRAVEL

Interactive Education

This product addresses the problems and strong needs associated with two distinct areas within education; those of literacy development and language learning. We have developed an innovative software solution to solve these two important problems. Our solution can be broken down into two main parts:(1) The underpinning technology which provides an interactive learning environment, powered by our novel audio-visual (A-V) fusion engine. This improves the learning experience for the user enormously, by dramatically reinforcing the underlying

association of listening and reading. (2) A core syllabus which has a unique ‘dynamic’ aspect, enables a teacher, instructor, parent/guardian alike to easily create (A-V) syllabus-content themselves at the touch of a button, thus they maintain full control over the entire education experience.

9—Kinometrics

Monitors the quality of hand washing in hospitals and food preparation

This hand washing quality assessment system is a tool which is used to analyse if someone has washed their hands in a correct way or not. It ensures the highest level of hygiene in places such as hospitals, clinics or kitchens. The aim of this project is to create a real-time embedded intelligent vision system to monitor hand washing and give live pose classification results.

10—Anamates

Animating with ease

Anamates is a new web based service making it possible for anyone to create animations with ease. Our software combines simplicity of use with powerful functionality, allowing users, after a very short learning curve, to create sophisticated and professional looking animations. We provide a library of images tailored for animations and the library is constantly growing, the more users create images and animations, the more the library grows. Add your favourite media from the web, collaborate with other users, present your work on our site or

your blog/website, improve your next presentation by adding your own custom animation.

11—Pudecas Technologies

Immersive Product Demonstration

Building on 3 years of research in the area of gaming technology, virtual worlds and their use in product demonstrations, Pudecas provides a new arena for advertising and promotion. Virtual worlds are internet-based, simulated environments where users interact via avatars that represent people. These worlds give users the ability to explore situations that are difficult to experience in the real world. The initial target product identified to launch through Pudecas are location based mobile services.