



The First International IEEE
Consumer Electronics Society

Games Innovation Conference

ICE-GIC 09

25-28th August 2009, London, UK



Microsoft
Research



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The International IEEE Consumer Electronics Society's Games Innovations Conference 2009 (ICE-GIC 09) aims to be a platform for innovative research in game design and technologies and to make this multi-disciplinary subject area more accessible to researchers and practitioners from different disciplines in academia and industry. The conference will take place in central London in UK between 25th-28th August 2009.

Areas of interest of ICE-CIG 2009 include display technologies and interfaces for games, audio technologies for games, mixed reality technologies, serious games, artificial intelligence technologies for games, science of games, games software engineering, innovations in commercial models in games, Machinima, game sound and music, games innovations in education and social impact of games technologies. For further details of conference interests under each topic please see the reverse page.

Submission

Papers: Authors are invited to submit papers describing significant, original and unpublished work. Such papers are expected to be approximately 8-15 pages in length but this guideline is not strict.

Abstracts/System Demonstrations/Panel discussions: Authors can also submit abstracts of up to 1000 words (3-4 pages). People who wish to give a talk (e.g. practitioners, researchers with preliminary or incomplete papers) but do not want to submit a full paper can submit under this category. For system demonstrations and panel discussions authors are required to submit an abstract. Authors of accepted submissions in system demonstration category would be expected to provide a demonstration of their software during the conference. Panel discussions are for 50 minutes and will normally include 4-5 experts.

Papers and abstracts will be fully refereed by the programme committee and selected on the basis of their innovation, relevance and scientific contribution. Demonstration submissions will be evaluated on the basis of. The accepted papers and abstracts will appear in the conference proceedings. A selection of the papers will appear in the special issue of IEEE transactions on Consumer Electronics. Authors of accepted abstracts will have the opportunity to write a full paper based on their abstract and submit it for the selected papers volume.

Submission web site: <http://www.easychair.org/conferences/?conf=icegic2009>

Venue

The ICE-GIC 09 conference will be held in central London, in Imperial College's South Kensington Conference Centre which is situated adjacent to landmarks such as the Royal Albert Hall, the Science Museum, Natural History Museum, Victoria & Albert Museums, and Hyde Park. The conference attendees will benefit from arrangements of special deals with hotels in central London and also using some high quality accommodation in Imperial College with very low prices.

Conference Administrator: Charlotte Kobert, ckobert@ieee.org

Conference website: <http://ice-gic.ieee-cesoc.org/>

Important Dates

Paper/abstract Submission:
30th April, 2009

Notifications of Acceptance:
15th June, 2009

Camera Ready Paper Submission:
15th June 2009

Proposals for Special Sessions:
30th April 2009

Proposals for Tutorials:
30th April 2009

Sponsors

This conference is organised by IEEE Consumer electronics society and current list of sponsors include:

1. De Montfort University, UK
2. United Kingdom & Republic of Ireland (UKRI) Section of IEEE.
3. Microsoft Research, Cambridge
4. UK Research Network on Artificial Intelligence and Video Game Technologies

Bursaries

Microsoft Research has offered funding to support the attendance of PhD students at the conference. This will be available as bursaries in the following form:

We will offer free registration to 3 PhD students so that they may attend the Games Innovation 2009 Conference in London. The students will meet their own travel, accommodation and any other costs. It is expected that the awards will be to students presenting papers and it is a condition of the award that papers are submitted by the conference deadline.

Applications should be made by the conference deadline for submission of papers with the following information:

- Student Name and institution/ email contact
- A 200 word account of your research
- A 200 word statement from your supervisor as to the value of the conference to you
- Your paper in the form described on the Paper Submissions link.

Late applications will be disqualified; no single institution may have more than two awards.

Applicants should register their papers in the normal way but additionally should email the 200 word statements along with their name, contact details, title of paper & abstract to jennyc@dmu.ac.uk

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Scope

Games Technologies Innovations

1. Display technologies and interfaces for games
 1. Stereoscopic/3D Displays
 2. Novel Interaction techniques such as touch, gesture, & gaze
 3. Health & safety
 4. Human factors of display
 5. Standards
2. Audio technologies for games
 1. Game audio control interfaces
 2. Interactive sound synthesis and processing
 3. Sound production
 4. Interactive / generative music
 5. Spatial audio
 6. Voice processing
3. Mixed reality technologies
 1. Original uses of location in mixed-reality gaming environments
 2. Experimental/creative uses of games for hybrid environments
 3. Exploration of games tools, which enhance mixed reality gaming
 4. Evaluation of structuring and conceptual models and techniques for supporting mixed-reality games innovations
4. Serious games
 1. Uncommon/novel usage domains
 2. Massively Multiplayer Online Worlds / Virtual Environments
 3. Real-time Learning and Educational Feedback
 4. Innovative hardware interfaces (e.g. iPhone)
5. Artificial intelligence technologies for games
 1. *Decision-Making, Learning and Adaptation:* Machine learning, reinforcement learning, neural networks, Bayesian techniques, genetic algorithms, state machines, fuzzy logic, rule-based AI, case-based systems, agent-based models, adaptive Markov models, natural language processing
 2. *Game AI Design Components:* Pathfinding, believable characters, terrain analysis, intelligent camera control, steering behaviours, movement control, sensory models, real-time performance, ecosystem design, virtual environments
 3. *Strategic AI and Collective Behaviour:* Crowd simulation, group behaviour, tactical pathfinding, flocking, agent cooperation, coordinated movement, formations, squad tactics
 4. *AI in Content Creation:* Automatic content generation, assisted content sharing, game design, data collection

5. *Player Profiling for Improved AI:* Automated player type detection, preference-based models, imitation techniques
6. Science of games
7. Games software engineering
 1. Games Software Process
 2. Games System Model
 3. Formal Aspects of Games Software
 4. Games Software Design
 5. Games Development
 6. Games Software Evolution
 7. Games Software Verification and Validation
 8. Games Software Management
 9. Network and Security Issues of Games Software

Creativity in Games

1. Designing for mixed-reality gaming
2. Innovations in commercial models in games
3. Machinima
 1. Analysis of machinima
 2. Original machinima creation in gaming environments
 3. Experimental creative uses of games for machinima
 4. Exploration of games tools which enhance machinimating capabilities
 5. Evaluation of how machinima techniques are supporting games innovations
4. Game Sound and Music
 1. History of music/sound in digital games
 2. Analysis of game sound/music
 3. Original musical creation in gaming environments
 4. Experimental creative uses of games in music and sound
5. Games innovations in education
 1. Using game education as a way to interface with a digital generation
 2. Open source tools utilized in game curriculum to learn development concepts
 3. Teaching game design and development in computer science curriculum and other disciplines;
 4. Using game design and development in teaching Science, Technology, Engineering and Mathematics (STEM);
 5. Experimental programs on using games to help facilitate learning;
 6. Rapid prototyping skills and group dynamics applied in game education;
6. Social impact of games technologies