The 8th International Workshop on Massively Multiuser Virtual Environments

MMVE 2016

at the ACM Multimedia Systems Conference (MMSys) | May 10-13, 2016 | Klagenfurt am Wörthersee, Austria

Call for Papers

Massively Multiuser Virtual Environment (MMVE) systems are spatial simulations that provide real-time human interactions among thousands to millions of concurrent users. MMVEs have experienced phenomenal growth in recent years in the form of massively multiplayer online games (MMOGs) such as World of Warcraft and Lineage, and social communities such as Second Life and Habbo Hotel. The technical aspect of designing, developing, and deploying them is highly interdisciplinary and involves experts from many domains, e.g., graphics, networking, protocol and architecture designs. The MMVE workshop intends to provide a forum for both academic researchers and industry developers to investigate the architectural and system support for MMVEs. By gathering experts under one roof, we wish to discuss their findings, incite collaborations, and move the state of the art forward.

Topics

The workshop seeks to provide a forum for researchers and practitioners in the field, and will encourage discussions based on the presented papers to identify current and future research topics. We are particularly interested in raising discussions about the following questions:

1. How is MMVE technology developed for games reused for distributed virtual environment in other domains, such as training?
2. How do the life-cycles and payment models of games integrated into social networking systems (Facebook etc.) influence game development?
3. How can MMVE technology leverage parallel computing technology, including multicore (Cell, GPU), tight clustering (transactional memory, distributed shared memory) and distributed systems (P2P, Clouds)?

The workshop addresses the following MMVE topics:

- Scalability, the ability to handle at least thousands of concurrent users, interacting via Internet.
- Interactivity, how to provide responsive, near real time interactions and user experience despite latency or jitter.
- Consistency, providing consistent views for users, despite the inherent delay in state updates.
- Persistence, the ability to save and access the world states despite disconnections and failures.
- Security and privacy, distributed algorithms allowing secure interactions and privacy guarantees.
- Interoperability, integration of multiple systems or providers with common protocols or clients.
- Bandwidth restricted (mobile) devices, the integration of mobile devices for nomadic systems.
- Self-organizing architectures, load balancing and fault tolerance without manual configurations.
- Video, voice and content streaming, also in (mixed) 3D, remote presence, incremental deployment and updating.
- Content generation methods, procedural or by users.
- Implementation issues, novel approaches to address development challenges, including sociological aspects.

As an intended focal point of discussion, we particularly solicit contributions related to the various challenges that recent advances in virtual reality (VR) and augmented reality (AR) pose to MMVE systems and architectures.

Important Dates

Submission Deadline: February 19, 2016
Acceptance Notification: March 23, 2016
Camera Ready Deadline: April 8, 2016
Workshop Date: May 12, 2016

Submission

We solicit full-size papers (6 pages), as well as extended poster abstracts (2 pages). For further details, please refer to the workshop website.

Workshop Website

http://mocca.uni.lu/MMVE2016/

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