MMVE 2010

Call for Papers

The Third International Workshop on Massively Multiuser Virtual Environments at the 7th ACM International Conference on Advances in Computer Entertainment Technology (**ACE 2010**)

Nov. 17, 2010 Taipei, Taiwan

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 Hobbo 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. 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. Some key and emerging issues we would especially like to solicit are:

- 1. The integration of MMVE with social networking systems such as Facebook and Instant Messengers.
- 2. The adoption of parallel techniques (e.g., GPU, P2P, household set-top boxes) to increase scale.
- 3. Interoperable MMVE standards and protocols based on observations or abstractions of existing systems.

The workshop addresses the following MMVE topics:

- 1. **Scalability**, the ability to handle at least thousands of concurrent users, interacting via Internet.
- 2. **Interactivity**, how to provide responsive, near real time interactions despite latency and jitter.
- 3. **Consistency**, providing consistent views for users, despite the inherent delay in state updates.
- 4. **Persistency**, the ability to save and access the world states despite disconnections and failures.
- 5. **Security and privacy**, distributed algorithms that allow secure interactions and privacy guarantees.
- 6. **Interoperability**, integration of multiple systems or providers with common protocols or clients.
- 7. Bandwidth restricted (mobile) devices, the integration of mobile devices for nomadic systems.
- 8. **Self-organizing architectures**, load balancing and fault tolerance without manual configurations.
- 9. **Content streaming**, voice communication and 3D content streaming.
- 10. **Implementation issues**, novel approaches to effectively manage the complexity of development.

Paper submissions must cover one of the topics above or a closely-related one. It must be a PDF file no greater than 6 pages in length, and *must be blinded*, while following the format guidelines at the submission site. Submissions that deviate from these guidelines will be rejected without consideration. Research papers must be original unpublished work and not under review elsewhere. Please submit at: http://peers-at-play.org/MMVE10/, and e-mail mmve@peers-at-play.org for any inquiries. Accepted papers will appear in a special issue of the International Journal of Advanced Media and Communications (IJAMC).

IMPORTANT DATES

Submission Deadline: Sept. 13, 2010 (extended)

Acceptance Notification: Oct. 4, 2010 Camera Ready: Oct. 11, 2010 Workshop Date: Nov.17, 2010

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