

MMVE'16

Proceedings of the 8th International Workshop on
Massively Multiuser Virtual Environments (MMVE'16)



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Klagenfurt, Austria
May 12, 2016



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Welcome to the Proceedings of the 8th ACM Workshop on Massively Multiuser Virtual Environments



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MMVE 2016



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

Foreword

We welcome you to the eighth ACM International Workshop on Massively Multiuser Virtual Environments (MMVE) on May 12, 2016 in Klagenfurt am Wörthersee, Austria. Held in conjunction with the ACM Multimedia Systems Conference (MMSys), the workshop aims at offering a forum for researchers and practitioners in the field of MMVE technology.

Massively Multiuser Virtual Environment systems are spatial simulations that provide real-time human interaction among thousands to millions of concurrent users. In recent years, MMVEs have experienced phenomenal growth in the form of massively multiplayer online games (MMOGs) such as World of Warcraft and social communities such as Second Life. The design, development, and deployment of MMVE systems is highly interdisciplinary and involves research and experts from many domains of computer science, e.g., graphics, networking, protocol and architecture design, but also other fields such as the social sciences.

For this edition of the workshop, we particularly solicited work related to the various challenges that recent advances in virtual reality (VR) and augmented reality (AR) pose to MMVE systems and architectures. Despite a relatively low number of submissions, we are able to offer an exciting program which — together with the shared keynote and AR-related conference session — sheds light on current trends and challenges. The contributions range from QoS measurement techniques over the employment of field-programmable gate arrays to general application design approaches for three-dimensional virtual worlds. In addition to the respective paper presentations, the closing discussion focusing on challenges of AR and VR in the context of MMVEs rounds up this year's workshop program.

We would like to thank the authors for their contributions, and the members of the technical program committee for their rigorous reviews of the submissions. We would also like to express our gratitude towards the ACM MMSys 2016 organizers for providing an ideal setting for the workshop.

We hope that you find the program both interesting and inspiring, and that the workshop and conference give you a valuable opportunity to discuss and share ideas with an international audience.

Jean Botev, MMVE 2016 Chair, University of Luxembourg, Luxembourg

Organization

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