

Proceedings of the 11<sup>th</sup> ACM Workshop on

## Immersive Mixed and Virtual Environment Systems

(MMVE'19)











# Welcome to the Proceedings of the $11^{th}$ Immersive Mixed and Virtual Environment Systems Workshop



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### **Foreword**

The 11<sup>th</sup> ACM SIGMM Workshop on Immersive Mixed and Virtual Environment Systems (MMVE 2019) received 18 high-quality (long and short papers) submissions, covering a variety of multimedia topics, including video streaming, virtual reality, augmented reality, Quality of Experience (QoE), spatial audio and gaming.

Based on the hard work from 28 Technical Program Committee (TPC) members, each submission received 3 to 4 reviews. 5 papers were accepted for the full paper oral session and 4 papers were accepted for the short paper session. We have structured the program this year such that MMVE 2019 will be highly engaging, by encouraging authors to showcase demos of their works, and boost discussion as part of a break out poster session.

We would like to thank all authors for their high-quality papers and the TPC members for their insightful inputs, which helped in producing a technical program of high quality.

We hope that the MMVE 2019 will be engaging, informative and enjoyable.

Mario Montagud, i2CAT Foundation & University of Valencia, Spain Francesca De Simone, CWI, Netherlands MMVE 2019 TPC Co-chairs

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## Keynote

Experience media: moving towards an age of digital experience

Nimesha Ranasinghe University of Maine

#### **Abstract:**

When humans interact with the outside world or one another, all of the senses are engaged; a true conversation is considered a full sensory experience. From early ages to the present world, people desire to have multisensory experiences in every aspect of their lives. From trying different foods, going to different places to playing games on virtual reality, they



continuously seek sensory stimuli to be a wholesome experience, yet the current technology lacks the inclusion of many essential sensory channels. This talk highlights several research works focusing on "Experience Media" that explore possibilities for novel multisensory interactive digital media technologies towards achieving total immersion in day-to-day digital interactions. This talk also emphasizes the need for looking beyond the current 'age of information' and step into a new 'age of experience'.

#### Bio:

Nimesha Ranasinghe is an Assistant Professor at the School of Computing and Information Science and directs the Multisensory Interactive Media lab (MIM lab - www.mimlab.info/) at University of Maine. He completed his Ph.D. at the Department of Electrical and Computer Engineering, National University of Singapore (NUS) in 2013. Dr. Ranasinghe's research interests include Multisensory Interactive Media, Human-Computer Interaction, Augmented and Virtual Reality. He is well-known for his Digital Taste (a.k.a. Virtual Flavors) and Virtual Cocktail (Vocktail) inventions and featured in numerous media around the world including New Scientist, New York Times, Time Magazine, BBC Radio, Discovery Channel, and Reuters. Furthermore, he has published his work in several prestigious academic conferences and journals including ACM conference on Human Factors in Computing Systems (CHI), ACM conference on Multimedia, and Journal of Human-Computer Studies. He has received numerous awards for his research works; in 2014 his work on Digital Lollipop was selected as one of the ten best innovations in the world by the Netexplo forum in UNESCO HQ, Paris.

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