

# Preface

We are pleased to present in this LNCS volume the Scientific and Technical papers of EuroVR 2017, the 14th annual EuroVR conference, which took place at the Laval Virtual Center (France) during December 12–14, 2017.

Prior to this year, the EuroVR conference was held at Bremen (2014), Lecco (2015), and Athens (2016). This series was initiated in 2004 by the INTUITION Network of Excellence in Virtual and Augmented Reality, supported by the European Commission until 2008, and incorporated within the Joint Virtual Reality Conferences (JVRC) from 2009 to 2013. The focus of the EuroVR conferences is to present, each year, novel virtual reality (VR) and mixed reality (MR) technologies, including software systems, display technologies, interaction devices, and applications, to foster engagement between industry, academia, and the public sector, and to promote the development and deployment of VR/AR technologies in new, emerging, and existing fields.

This annual event of the EuroVR association (<https://www.eurovr-association.org/>) provides a unique platform for exchange between researchers, technology providers, and end users around commercial or research applications. Along with the scientific and technical sessions comprising the research papers of this LNCS volume, industry-oriented sessions were also organized to report a number of use cases and applications of VR/AR technologies in multiple fields (automotive, medical, etc.). In addition, poster and demo sessions were held to allow discussions around several works in progress.

EuroVR 2017 was a very special issue of our annual conference, because it was the first year that we collaborated with Springer to publish the papers of the scientific and technical track of our annual conference. To increase the excellence of this applied research conference, which is basically oriented toward new uses of VR and AR technologies, we created a set of committees including an International Program Committee (IPC).

This IPC selected 12 papers for the scientific/technical track of EuroVR 2017, which are gathered in this LNCS volume. Ten full papers and two short papers were selected from 36 submissions, resulting in an acceptance rate of 33%. Each paper was reviewed by three members of the IPC with the help of some external expert reviewers. From the review reports, the final decision was taken by the IPC co-chairs, with the participation of one of the general conference co-chairs. Moreover, a few rejected papers were redirected to the industrial, poster, or demo tracks, based on the recommendation of the reviewers.

The selected papers are organized in four topical parts: Interaction Models and User Studies, Visual and Haptic Real-Time Rendering, Perception and Cognition, and Rehabilitation and Safety. This volume also includes the keynote abstracts of the invited speakers of EuroVR 2017: Martin Courchesne (CEA LIST, France), Philippe Gelin (European Commission, Luxembourg), Anatole Lécuyer (Hybrid, Inria, France),

Wendy Powell (University of Portsmouth, UK), and Frank Steinicke (University of Hamburg, Germany).

We would like to thank the members of the IPC and the external reviewers for their insightful reviews, which ensured the high quality of the papers selected for the scientific/technical track. Furthermore, we would like to thank the industrial co-chairs, the poster/demo co-chairs, and the local organizers of the Laval Virtual Center.

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