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Introduction

This Videometrics conference is 11th in a series begun in 1991. Under the auspices of SPIE—The International Society for Optical Engineering, Sabry El-Hakim arranged the first conference on Industrial Vision Metrology at Winnipeg in Canada. Based on the success of this first venture into the emerging discipline, the conference was renamed Videometrics and held in conjunction with the SPIE Photonics East symposium in Boston and Philadelphia during 1992–1995. Videometrics was then relocated among the approximately 20 conferences composing the IS&T/SPIE Electronic Imaging symposium (jointly sponsored by IS&T—Society for Imaging Science and Technology and SPIE), collocated with SPIE's Photonics West event held annually in California. The conferences were held once in San Diego, in 1997, then twice in San Jose, in 1999 and 2000, and given the longer title of "Videometric and Optical Methods for 3D Shape Measurement."

In 2003, Electronic Imaging was geographically separated from Photonics West, primarily because the event had become too large to be easily accommodated in available convention facilities in California. Electronic Imaging was held in Santa Clara in 2003, and moved back to San Jose in 2005. Since then the two symposia both have been held in San Jose, but in consecutive weeks.

The Electronic Imaging conferences combine the disciplines of 3D imaging, visualisation, image processing, digital image sensors, multimedia processing, and video communications. Although the individual conferences generally span one to three days, the schedule is staggered so that there is a selection of 15–20 technical sessions at any time during the meeting. Attendees thereby get the benefit of seeing the broader extent of discipline areas allied to Videometrics.

During the last 15 years, Videometrics has provided a unique forum for computer vision and photogrammetry practitioners to present the latest advances in precise 3D measurement and modelling from imaging and range sensors. Videometrics was originally focused on the metric performance of sensors and algorithms to produce the most accurate and reliable geometric measurements and models. Topics such as sensor calibration, performance evaluation, and accurate object reconstruction were paramount. This has now been expanded to encompass all phases of 3D imaging and modelling of real scenes including automation of data collection and processing, improving the visual quality and realism, visualization, animation, and data management for real-time manipulation. This is in response to the rapidly growing interest in 3D imaging and modelling technology, and the increase in demand of such models in applications such as rapid product development, virtual museums, documentation of monuments and architecture for cultural heritage, marketing

and tourism, human body modelling, medicine, and exploration of remote and hazardous sites, to name a few.

The chairs of Videometrics welcome and acknowledge the efforts of the authors, presenters, and audience in maintaining the high level of interest in Videometrics and contributing to the success of the meeting.

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