Editorial

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Published online: 2 June 2015
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Welcome to the special issue of the 32nd Computer Graphics International (CGI'15) conference. Computer Graphics International is one of the oldest and truly international conferences in computer graphics and is one of the main places where people gather to share their latest achievements in computer graphics. CGI is the official conference of the Computer Graphics Society, a long-standing international computer graphics organization. CGI and CGS were initiated in Tokyo by Professor T.L. Kunii from the University of Tokyo in 1983. Since then, the CGI conference has been held in many different countries across the world and is one of the key conferences to discover the latest advances in computer graphics. This year, CGI'15 has been held at the University of Strasbourg, France, from June 24 to 26. This conference has been supported by the Computer Graphics Society and has been organized in cooperation with ACM/Siggraph and Eurographics.

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This special issue of the Visual Computer is composed of the 36 best papers of CGI'15. We have received 175 submissions from over 30 countries, making the acceptance rate about 20 %. To ensure the highest quality of publications, each paper has been assigned to three expert reviewers. The International Program Committee was composed of 110 members plus 128 external sub-reviewers invited by the IPC.

1 Articles in this issue

The articles that are included in this special issue reflect well the diversity of the research topics in computer graphics. The two topics with the largest number of papers are the 2D/3D modeling and the character animation with approximately ten papers for each. The other papers of this special issue are related to physics-based simulation, matching and segmentation, rendering, visualization and image processing.

This special issue includes eight papers on the topic of 2D/3D modeling. The papers by Camozzato et al. [1], Zhao et al. [2] and Company et al. [3] are about sketch-based modeling. Two other papers by Biswas et al. [4] and Sa et al. [5] focus on the topic of 3D modeling with an application in 3D printing. The three last papers by Lee et al. [6], Bohl et al. [7] and Paulus et al. [8] are about the performance analysis of bounding regions, the modeling of 3D fruits and the virtual cutting of deformable objects.

Nine papers related to character animation have been included in this special issue. Three papers by Barut and Haciomeroglu [9], Che et al. [10] and Ozcan and Haciomeroglu [11] are about crowd simulation. The four other papers by Lee et al. [12], Kim et al. [13], Hartmann et al. [14] and Choi et al. [15] focus on the problem of human motion synthesis and retargeting. The two last papers

by Ahmed et al. [16] and Ruiz et al. [17] are about human motion recognition and generating animated paper pop-ups from motion data.

Three papers on physics-based simulation have been added to this special issue. The paper by Li et al. [18] is about brittle fracture animation; the paper by Pan et al. [19] focuses on the deformation of organs for virtual surgery and the one by Sato et al. [20] describes a method for the simulation of fluids.

This special issue includes also three papers related to the problems of matching and segmentation. The paper by Dou et al. [21] is about non-rigid registration; the one by Wang et al. [22] focuses on the problem of 3D object tracking in videos and the paper by Getto et al. [23] is about medical image segmentation.

Five papers on rendering and graphics hardware are in this special issue: the paper by Zheng and Zheng [24] is about photon tracing; the paper by Vanhoey et al. [25] focuses on the mesh simplification using radiance; Adhikarla et al. [26] describe a method to increase the quality of visual perception on light field display; Rodríguez-Cerro et al. [27] present a technique for texture advection. The last paper by Kim and Kim [28] presents a method to improve the performance of graphics processor units.

This special issue contains three papers on the topic of visualization. Splechna et al. [29] present a data view to explore and analyze interactions between parameters. Walker et al. [30] describe a system for the classification of multi-dimensional time series data and the last paper by Jones et al. [31] presents a system for the visualization of dynamic models.

There are four papers on the topic of image processing. The paper by Debattista et al. [32] is about the compression of high dynamic range images. Yatagawa and Yamaguchi [33] present a method for the appearance editing for images. The paper by Hua and Wang [34] presents an image completion method and the last paper related to image processing is by Qiao et al. [35]; they describe a technique to generate QR codes that are visually similar to an input image.

The last paper of this issue is by Wang et al. [36]. They present an Empirical Mode Decomposition method for the analysis and manipulation of 3D shapes.

2 Acknowledgments

This conference would not be made possible without the support of the International Program Committee members and the external reviewers who have provided timely reviews. We would like also to thank all the authors who have submitted their work to CGI'15. Our special thanks go to the organizing committee of CGI'15 who has contributed to the success of this event.

3 International program committee

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