Tai-hoon Kim Hojjat Adeli
William I. Grosky Niki Pissinou
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Communications in Computer and Information Science 262

Multimedia, Computer Graphics and Broadcasting

International Conference, MulGraB 2011
Held as Part of the Future Generation
Information Technology Conference, FGIT 2011
in Conjunction with GDC 2011
Jeju Island, Korea, December 2011, Proceedings, Part I

Part 1

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Foreword

Multimedia, computer graphics and broadcasting are areas that attract many professionals from academia and industry for research and development. The goal of the MulGraB conference is to bring together researchers from academia and industry as well as practitioners to share ideas, problems and solutions relating to the multifaceted aspects of multimedia, computer graphics and broadcasting.

We would like to express our gratitude to all of the authors of submitted papers and to all attendees for their contributions and participation.

We acknowledge the great effort of all the Chairs and the members of Advisory Boards and Program Committees of the above-listed event. Special thanks go to SERSC (Science and Engineering Research Support Society) for supporting this conference.

We are grateful in particular to the speakers who kindly accepted our invitation and, in this way, helped to meet the objectives of the conference.

December 2011 Chairs of MulGraB 2011

Preface

We would like to welcome you to the proceedings of the 2011 International Conference on Multimedia, Computer Graphics and Broadcasting (MulGraB 2011) — the partnering event of the Third International Mega-Conference on Future-Generation Information Technology (FGIT 2011) held during December 8–10, 2011, at Jeju Grand Hotel, Jeju Island, Korea

MulGraB 2011 focused on various aspects of advances in multimedia, computer graphics and broadcasting. It provided a chance for academic and industry professionals to discuss recent progress in the related areas. We expect that the conference and its publications will be a trigger for further related research and technology improvements in this important subject.

We would like to acknowledge the great effort of the MulGrab 2011 Chairs, Committees, International Advisory Board**,** Special Session Organizers, as well as all the organizations and individuals who supported the idea of publishing this volume of proceedings, including the SERSC and Springer.

We are grateful to the following keynote, plenary and tutorial speakers who kindly accepted our invitation: Hsiao-Hwa Chen (National Cheng Kung University, Taiwan), Hamid R. Arabnia (University of Georgia, USA), Sabah Mohammed (Lakehead University, Canada), Ruay-Shiung Chang (National Dong Hwa University, Taiwan), Lei Li (Hosei University, Japan), Tadashi Dohi (Hiroshima University, Japan), Carlos Ramos (Polytechnic of Porto, Portugal), Marcin Szczuka (The University of Warsaw, Poland), Gerald Schaefer (Loughborough University, UK), Jinan Fiaidhi (Lakehead University, Canada) and Peter L. Stanchev (Kettering University, USA), Shusaku Tsumoto (Shimane University, Japan), Jemal H. Abawajy (Deakin University, Australia).

We would like to express our gratitude to all of the authors and reviewers of submitted papers and to all attendees, for their contributions and participation, and for believing in the need to continue this undertaking in the future.

December 2011

Tai-hoon Kim
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