

Preface

This book includes extended and revised versions of a set of selected papers from the 16th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications (VISIGRAPP 2021), that was exceptionally held as an online event, due to COVID-19, on February 8–10, 2021.

The purpose of VISIGRAPP is to bring together researchers and practitioners interested in both theoretical advances and applications of computer vision, computer graphics and information visualization. VISIGRAPP is composed of four co-located conferences, each specialized in at least one of the aforementioned main knowledge areas, namely GRAPP, IVAPP, HUCAPP and VISAPP.

VISIGRAPP 2021 received 371 paper submissions from 53 countries, of which 4% were included in this book.

The papers were selected by the event chairs and their selection is based on a number of criteria, including the classifications and comments provided by the program committee members, the session chairs' assessment and also the program chairs' global view of all papers included in the technical program. The authors of selected papers were then invited to submit a revised and extended version of their papers having at least 30% innovative material.

The papers selected to be included in this book contribute to the understanding of relevant trends of current research on Computer Vision, Imaging and Computer Graphics Theory and Applications, including: Deep Learning for Visual Understanding, High-Dimensional Data and Dimensionality Reduction, Information Visualization, Interactive Systems for Education and Training, Machine Learning Technologies for Vision, Software Visualization, Visualization Applications, Evaluation Paradigms and Frameworks, Early and Biologically-Inspired Vision, Deep Learning for Tracking, Impact of Avatar Representation in Virtual Reality-Based Simulations, and Techniques for Automatic 3D Cities Modeling.

We would like to thank all the authors for their contributions and also the reviewers who helped ensuring the quality of this publication.

February 2021

A. Augusto de Sousa
Vlastimil Havran
Alexis Paljic
Tabitha Peck
Christophe Hurter
Helen Purchase
Giovanni Maria Farinella
Petia Radeva
Kadi Bouatouch