

Handbook of Multimedia for Digital Entertainment and Arts

Borko Furht
Editor

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Preface

The advances in computer entertainment, multi-player and online games, technology-enabled art, culture and performance have created a new form of entertainment and art, which attracts and absorbs their participants. The fantastic success of this new field has influenced the development of the new digital entertainment industry and related products and services, which has impacted every aspect of our lives.

This Handbook is carefully edited book – authors are 88 worldwide experts in the field of the new digital and interactive media and their applications in entertainment and arts. The scope of the book includes leading edge media technologies and latest research applied to digital entertainment and arts with the focus on interactive and online games, edutainment, e-performance, personal broadcasting, innovative technologies for digital arts, digital visual and auditory media, augmented reality, moving media, and other advanced topics. This Handbook is focused on research issues and gives a wide overview of literature.

The Handbook comprises of five parts, which consist of 33 chapters. The first part on Digital Entertainment Technologies includes articles dealing with personalized movie, television related media, and multimedia content recommendations, digital video quality assessments, various technologies for multi-player games, and collaborative movie annotation. The second part on Digital Auditory Media focuses on articles on digital music management and retrieval, music distribution, music search and recommendation, and automated music video generation. The third part on Digital Visual Media consists of articles on live broadcasts, digital theater, video browsing, projector camera systems, creating believable characters, and other aspects of visual media.

The fourth part on Digital Art comprises articles that discuss topics such as information technology and art, augmented reality and art, creation process in digital art, graphical user interface in art, and new tools for creating arts. The part V on Culture of New Media consists of several articles dealing with interactive narratives, discussion on combining digital interactive media, natural interaction in intelligent spaces, and social and interactive applications based on using sound-track identification.

With the dramatic growth of interactive digital entertainment and art applications, this Handbook can be the definitive resource for persons working in this field as researchers, scientists, programmers, and engineers. The book is intended for a

wide variety of people including academicians, animators, artists, designers, developers, educators, engineers, game designers, media industry professionals, video producers, directors and writers, photographers and videographers, and researchers and graduate students. This book can also be beneficial for business managers, entrepreneurs, and investors. The book can have a great potential to be adopted as a textbook in current and new courses on Media Entertainment.

The main features of this Handbook can be summarized as:

- The Handbook describes and evaluates the current state-of-the-art in multimedia technologies applied in digital entertainment and art.
- It also presents future trends and developments in this explosive field.
- Contributors to the Handbook are the leading researchers from academia and practitioners from industry.

I would like to thank the authors for their contributions. Without their expertise and effort this Handbook would never come to fruition. Springer editors and staff also deserve our sincere recognition for their support throughout the project.

Borko Furht
Editor-in-Chief
Boca Raton, 2009

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