



Volume 28

Issue 2

April 2004

ISSN 0097-8493

COMPUTERS & GRAPHICS



An international journal of systems
& applications in computer graphics

Algorithms and techniques for interaction,
multimedia, modelling and visualization

EDITOR-IN-CHIEF: J. L. Encarnaç o



In this issue the special topic is

VIDEO TECHNOLOGY AND INTERACTIVE BROADCASTING

Guest Editors: Dirk Balfanz, David Shrimpton

AVAILABLE AT
www.ComputerScienceWeb.com

POWERED BY SCIENCE @ DIRECT®

Computers & Graphics, Vol. 28, No. 2, 2004

Contents (*Cont'd*)

- Sinésio Pesco, Geovan Tavares and Hélio Lopes** 235 A stratification approach for modeling two-dimensional cell complexes
- Tomek Martyn** 249 A new approach to morphing 2D affine IFS fractals
- Stanimire Tomov, Robert Bennett, Michael McGuigan, Arnold Peskin, Gordon Smith and John Spiletic** 273 Application of interactive parallel visualization for commodity-based clusters using visualization APIs
- Shih-Kuan Liao, Jim Z.C. La and Yeh-Ching Chung** 279 Time-critical rendering for time-varying volume data
- Marta Fairén, Pere Brunet and Torsten Techmann** 289 MiniVR: a portable virtual reality system
- Clifford A. Reiter** 297 Views of Fibonacci dynamics
- 301 Announcements
- 307 Past/Future Issues

CONTENTS
Direct

This journal is part of **ContentsDirect**, the *free* alerting service which sends tables of contents by e-mail for Elsevier books and journals. You can register for **ContentsDirect** online at: <http://contentsdirect.elsevier.com>



ELSEVIER

ISSN 0097-8493

In this issue the special topic is

VIDEO TECHNOLOGY AND INTERACTIVE BROADCASTING

Guest Editors: Dirk Balfanz, David Shrimpton

		<i>Editorial</i>
D. Balfanz and D. Shrimpton	137	Editorial video technology and interactive broadcasting
Manuel José Damásio, Célia Quico and André Ferreira	139	Interactive television usage and applications: the Portuguese case-study
Dina Goren-Bar and Oded Glinansky	149	FIT-recommending TV programs to family members
Konstantinos Chorianopoulos and Diomidis Spinellis	157	User interface development for interactive television: extending a commercial DTV platform to the virtual channel API
Inger Ekman and Petri Lankoski	167	Integrating a game with a story—lessons from interactive television concept design
Matthias Finke and Dirk Balfanz	179	A reference architecture supporting hypervideo content for ITV and the internet domain
Steven Van Assche, Filip Hendrickx, Nico Oorts and Lode Nachtergaele	193	Multi-channel publishing of interactive multimedia presentations
		<i>Technical Section</i>
Zhongwei Yin	207	Reverse engineering of a NURBS surface from digitized points subject to boundary conditions
Timothy S. Newman, J. Brad Byrd, Pavan Emani, Amit Narayanan and Abouzar Dastmalchi	213	High performance SIMD marching cubes isosurface extraction on commodity computers

(continued)

Indexed in GMT Abstr, Cam Sci Abstr, Comput Cont, Curr Cont,® Research Alert®, Curr Cont/CompuMath, Curr Cont/Eng Tech & Applied Sci, Curr Cont SCISEARCH® Data, Eng Ind, Ergon Abstr, Info Sci, Abstr, INSPEC Data, PIRA, SSSA/CISA/ECA/ISMEC

ISSN 0097-8493

TYPESET BY MACMILLAN INDIA LTD., BANGALORE-25
PRINTED IN GREAT BRITAIN BY POLESTAR WHEATONS LTD, EXETER

371



ELSEVIER



0097-8493(200404)28:2;1-V