

Volume 18, Number 3, May/June 1994

ANCAU DU PASSE

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. Encarnaçã**



*In this issue the special topic is*

COMPUTER GRAPHICS IN EDUCATION  
Guest Editors: Ken Brodlie and G. Scott Owen



PERGAMON

---

# computers & graphics

An International Journal

---

Contents

Vol. 18, No. 3, 1994

---

In this issue the special topic is  
COMPUTER GRAPHICS IN EDUCATION  
Guest Editors: Ken Brodlie and G. Scott Owen



- Ken Brodlie and G. Scott Owen 259 *Computer Graphics in Education*  
Guest Editors' Introduction
- Ken Brodlie, Terry Hewitt, Steve Larkin, Phil Willis and Julian Gallop 263 Graphics and Visualization—Techniques and tools: A course for postgraduates of all disciplines
- C. C. Lilley, F. Lin, W. T. Hewitt and T. L. J. Howard 269 The design and development of distance learning materials for graphics and visualization
- Gitta O. Domik 277 Visualization education
- Bernard M. Diaz 281 A place for novelty in graphics and visualization education
- D. B. Arnold and A. M. Day 287 "Graphics standards are boring"—Discuss
- Jean-Claude Lafon 295 2D and 3D graphics with PostScript and PHIGS
- S. C. Maddock 299 A personal CAL workbook
- G. Scott Owen 305 Teaching image synthesis as a physical science
- José Carlos Teixeira and Joaquim Silvestre Madeira 309 A computer graphics curriculum at the University of Coimbra
- Bert Jüttler 315 *Technical Section*  
Visualization of moving objects using dual quaternion curves
- Kuo-Liang Chung and Wen-Ming Yan 327 A fast algorithm for cubic B-spline curve fitting
- Chyi-Hwa Chu and Yuang-Cheh Hsueh 335 An adaptive enhancement algorithm for quantized images

(continued)

ISSN 0097-8493

## Computers & Graphics, Vol. 18, No. 3, 1994

Contents (Contd)

- Horace H. S. Ip, Helena T. F. Wong and Florence Y. Mong** 343 Fractal coding of Chinese scalable calligraphic fonts
- Chee Kai Chua, Robert Gay and Wolfgang Hoheisel** 353 A method of generating motifs aligned along a circular arc
- Sandeep Dani, Joel H. Tohline, Warren N. Waggenpack, Jr. and David E. Thompson** 363 Parallel rendering of curvilinear volume data
- D. Arques and O. Grange** 373 Digital topology in 2.5 D: An application to topological filling of well-nested objects
- Hans-Heino Ehrlicke, Klaus Donner, Walter Koller and Wolfgang Straßer** 395 Visualization of vasculature from volume data
- Chaos and Graphics*
- Clifford A. Pickover** 407 Automatic parallel generation of Aeolian fractals on the IBM Power Visualization System
- J. C. Sprott** 417 Automatic generation of iterated function systems
- Announcements*
- 427 Past/future issues
- 429 IEEE Tencon '94
- 430 International Conference Pacific Graphics '94/CADDMM'94
- 431 Fifth Eurographics Workshop on Animation and Simulation
- 432 Workshop on Integration of CA-Techniques In Theory and Practice/ICA '94
- 433 RIAO '94/Intelligent Multimedia Information Retrieval Systems and Management
- 435 1994 Symposium on Volume Visualization
- 436 International Dedicated Conference on Robotics, Motion and Machine Vision
- 437 Multimedia Transport and Teleservices
- 439 First IEEE International Conference on Image Processing
- 440 CAPE '95/First Announcement and Call For Papers

