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Combinatorial Image Analysis

11th International Workshop, IWCIA 2006
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Proceedings



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Preface

This volume presents the proceedings of the 11th International Workshop on Combinatorial Image Analysis. IWCIA 2006 was the 11th in a series of international workshops devoted to combinatorial image analysis. Prior meetings took place in Paris (France 1991), Ube (Japan 1992), Washington DC (USA 1994), Lyon (France 1995), Hiroshima (Japan 1997), Madras (India 1999), Philadelphia (USA 2001), Palermo (Italy 2003) and Auckland (New Zealand 2004). For this workshop we received 59 papers from all over the world. Each paper was assigned to three independent referees and carefully revised. Finally, we selected 34 papers for the conference based on content, significance, relevance, and presentation.

Conference papers are presented in this volume in the order they were presented at the conference. The topics of the conference covered combinatorial image analysis, grammars and models for analysis and recognition of scenes or images, combinatorial topology and geometry for images, digital geometry of curves or surfaces, algebraic approaches to image processing, image, point-clouds or surface registration as well as fuzzy and probabilistic image analysis.

The program followed a single-track format with presentations of all published conference papers. Non-overlapping oral and poster sessions ensured that all attendees had opportunities to interact personally with presenters. Among the highlights of the meeting were the talks of our two invited speakers, renowned experts in the field of discrete geometry, digital topology, and image analysis:

- David Coeurjolly (University of Lyon, France):
Computational Aspects of Digital Plane and Hyperplane Recognition
- Longin Jan Latecki (Temple University, Philadelphia, USA):
Polygonal Approximation of Point Sets.

The editors thank all the referees for their big effort in reviewing the submissions and maintaining the high standard of IWCIA conferences. We are also thankful to the sponsors of IWCIA 2006: Humboldt University for hosting the workshop, IAPR for advertising the event, and the German Aerospace Center for financial support. Finally, the organizers wish to thank all contributing authors and our sponsors. Their support was essential for realizing this workshop. In addition, we like to express our appreciation to the people whose efforts made this conference a success.

June 2006

Ulrich Eckardt, Boris Flach, Uwe Knauer,
Konrad Polthier and Ralf Reulke

Organization

IWCIA 2006 was organized by the department of Computer Science, Humboldt-Universität zu Berlin. The workshop was endorsed by the IAPR.

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