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Discrete Geometry for Computer Imagery

6th International Workshop, DGCI'96
Lyon, France, November 13-15, 1996
Proceedings



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Préface

Ces actes contiennent les contributions écrites de la 6ème Conférence Discrete Geometry for Computer Imagery (DGCI'96), qui a eu lieu à Lyon du 13 au 15 novembre 1996. Les conférences DGCI ont débutées en 1991, et ont eu lieu alternativement à Strasbourg, Grenoble, et Clermont-Ferrand.

Travailler avec des images implique de développer des modèles discrets pour le codage, le traitement, la reconnaissance, etc. Aussi le but de cette conférence est de fédérer les recherches en géométrie discrète touchant à l'analyse d'images, à la synthèse d'images, et aux modèles discrets.

Pour DGCI'96, les sessions portent sur les thèmes essentiels du domaine : la topologie, la géométrie, la représentation de formes, les surfaces et les volumes, les modèles de l'espace discret, les transformations et générations d'images, etc, en allant de la théorie à la pratique.

Nous avons reçu 41 articles pour soumission, et chacun d'eux a été évalué par au moins trois rapporteurs indépendants. 25 contributions originales ont été sélectionnées pour la conférence. Elles ont été complétées d'un cours et de 4 conférences invitées. Ces contributions se répartissent entre 17 venant de France, 5 d'autres pays d'Europe, 6 d'Amérique, et 2 d'Asie.

Parce que Lyon est au confluent de trois fleuves et rivières (le Rhône, la Saône, et le Beaujolais), et parce que cette troisième rivière renaît chaque année le troisième jeudi de novembre, une session "Beaujolais nouveau" a complété le programme le 14 novembre.

Nous tenons à remercier tous les auteurs qui ont répondu à l'appel à soumission, nos conférenciers invités, les relecteurs et les membres du comité de programme.

Nous sommes extrêmement reconnaissants aux PRC-GDR ISIS (Information, Signal, et Images) et PRC-GDR AMI (Algorithmique, Modèles, et Infographie) du CNRS, au LIP de l'ENS Lyon (Laboratoire de l'Informatique du Parallélisme) (URA CNRS 1398 – INRIA Research Unit), et à l'ENS Lyon (École Normale Supérieure de Lyon) pour avoir fourni des moyens financiers et humains, ainsi que des aides d'organisation.

Nous tenons particulièrement à remercier Sylvie Boyer, Sylvain Contassot-Vivier, Jean-Marc Pierson, et Valérie Roger qui ont contribué à ce que DGCI'96 soit un événement pleinement réussi.

Lyon, septembre 1996

Serge Miguet, Annick Montanvert, et Stéphane Ubéda

Preface

These proceedings contain the written contributions to the 6th Conference on Discrete Geometry for Computer Imagery (DGCI'96), held in Lyon, November 13 to 15, 1996. The DGCI conferences started in 1991, and took place alternately in Strasbourg, Grenoble, and Clermont-Ferrand.

Dealing with images implies developing discrete models for coding, processing, recognizing, etc. Consequently, the aim of this series of conferences is to combine research on discrete geometry for image analysis, image synthesis, and discrete models.

The sessions of DGCI'96 cover the main topics of the field: topology, geometry, shape representation, 3D surfaces and volumes, models for discrete space, image transformation and generation, ... covering both theory and applications.

We received 41 submitted papers, and each one was evaluated by at least three independent reviewers. We selected 25 papers for the conference. One tutorial and four invited speakers completed the program. Among these contributions, 17 came from France, 5 from other countries in Europe, 6 from America, and 2 from Asia.

Because Lyon is at the junction of three main rivers (Rhône, Saône, and Beaujolais), and because this third river retakes on a new lease of life every year on the third Thursday of November, a "Beaujolais nouveau" session completed the program on November 14th.

We would like to thank all the authors who responded to the call for papers, as well as the invited speakers, all of the referees, and the members of the Program Committee.

We are grateful to the joint research programs PRC-GDR ISIS (Information, Signal, et Images) and PRC-GDR AMI (Algorithmique, Modèles, et Infographie) of the French CNRS, to the LIP of ENS Lyon (Laboratoire de l'Informatique du Parallélisme) (URA CNRS 1398 - INRIA Research Unit), and to ENS Lyon (Ecole Normale Supérieure de Lyon) for providing financial and secretarial support, as well as facilities for the conference.

We would like to thank particularly Sylvie Boyer, Sylvain Contassot-Vivier, Jean-Marc Pierson, and Valérie Roger, who helped DGCI'96 to be a successful event.

Lyon, September 1996

Serge Miguet, Annick Montanvert, and Stéphane Ubéda

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