ISVD 2007

Foreword from the Editor

The International Symposium on Voronoi Diagrams in Science and Engineering holds its fourth conference in Wales, UK, illustrating the continuing interest in Voronoi and Delaunay methods, and the expanding list of application areas.

The Symposium was started because of the pressing demand for an international forum devoted exclusively to one of the most versatile and fascinating data structures in Computational Geometry - the Voronoi diagram, and due to the renewed interest in this area from many applied as well as fundamental sciences. It was intended and it has become an interdisciplinary forum for leading researchers to present the latest developments and applications of Voronoi diagrams, to discuss cutting-edge techniques, to exchange research ideas and to promote international collaboration in this field. Key topics for the Symposium are:

1. Theoretical aspects of Voronoi diagrams
2. Computational and implementation aspects of Voronoi diagrams
3. Generalization of Voronoi diagrams
4. Voronoi Art
5. Applications of the Voronoi/Delaunay methodology to other areas

The papers in this Symposium cover a whole range of interests - theoretical mathematical treatments, implementation concerns in Computational Geometry, and applications at all scales, from molecular modelling to geographic information systems, to cosmology, to art. We think this shows the generality of a spatial model whose time has come.

The current Symposium could only exist because of the enthusiasm and dedication of those who organised the previous ones. Prof. Kokichi Sugiha ra chaired the initial ISVD 2004 in Tokyo, Japan; Prof. Deok-Soo Kim chaired ISVD 2005 in Seoul, Korea; and Prof. Marina Gavrilova chaired ISVD 2006 in Banff, Canada. It is a great pleasure to thank them for their previous, and ongoing, enthusiasm and support - not only in the promotion of the Symposia, but for their personal warmth and friendship. This year’s chairman is conscious that his work is only the current expression of a shared vision and endeavour.

Of course, so much of the real work is done by a research community that takes its share of the unsung jobs of reviewing and organisation. I thank all the reviewers who accepted the job, produced their reviews on time and with conscientious thoroughness, and tolerated the pestering by an anxious editor. It is an honour to belong to such a community. The Steering Committee, in its turn, helped the chairman to avoid too many blunders, and kept the whole process going. This effort was again supported by the IEEE Computer Society Conference Publishing Services, who took the disparate contributions and made a Proceedings that we can all be proud of.

Of course, this whole edifice depends in the end on the contributors themselves, who submitted their work to the Symposium, even if only half of them could be accepted as full papers. Their own industry and enthusiasm is what makes the whole process worthwhile, and form the basis for future developments. Particularly notable was the wide range of topics of the papers, their quality, and their widely dispersed origins - this is extremely encouraging for the long-term development of the field. I thank them in particular for their efforts, as this is where the future of the discipline lies.
As always, our most heartfelt thanks must always go to the Local Organizing Committee, for cheerfully shouldering not only the jobs that they volunteered for, but also the many others that had not been foreseen.

Chris Gold
Chair, ISVD 2007