

Editorial

We have a pleasant duty to present an issue of CIT, containing selected papers from the Information Technology Interfaces, ITI 2000 Conference and IWISPA 2000 Workshop. Authors from 20 countries submitted 81 papers to the ITI Conference. Sixty six papers were accepted for the Conference proceedings. Out of them, after a multi-criteria choice: referees' quality assessment, relevance and variety of topics to be represented for the Conference, a selection of seven papers was made. Altogether ten articles have been chosen, including three IWISPA contributions.

The selection starts with an educational and informative paper about new methods and tools for the Web search. In this, fast developing field facing the problem of information overchoice and difficulty to retrieve the information required, a critical assessment of novelties and recognition of trends is of wide interest for the IT community.

After reflecting about the available Web solutions, there is an article describing the development process of a complex Web-based advertising system. It includes technical considerations, but it also tackles the problems of development policy and the risks associated with investments into this emerging field.

What follows are three articles with one feature in common: the computer graphics. Not so long ago, computer graphics was an exclusive and expensive playground reserved for highly demanding applications and investigations. Nowadays, it is ubiquitous and some aspects of its usage for education purposes are presented. The described visualisation techniques are aimed to improve the core field of computing: the programming. Using successive three-dimensional shape modelling, an interesting practical application is presented. And, finally, texturing, which is one of the fundamental procedures in computer graphics, is analysed, discussing three distinct animation techniques and the respective software tool to be used by the texture animator.

Application of operational research techniques for cost allocation in networks with threshold-based discounting presents the mathematical model aimed to help the network design as one of the crucial components of the IT infrastructure.

And last in the ITI section, but not least, an article on mathematics and algorithm design is presented. It is a contribution to triangulation for simple polygons.

There is no doubt that a greater number of articles would deserve to be printed in CIT, but we have to conform to the long term policy of high selection standards enforced by a limited number of eligible articles.

In this issue we also present a selection of papers from the 1st International Workshop on Image and Signal Processing and Analysis (IWISPA 2000), held in conjunction with ITI 2000. The workshop proceedings contain 41 papers on different areas of signal and image processing and analysis, including two invited papers. We have selected three papers for the special issue.

Nonlinear digital filters are subject of intensive research efforts as they can deliver better results in some applications than linear filters. A paper on nonlinear digital signal processing compares different nonlinear low complexity filters to acoustic echo cancellation.

Digital filter banks are useful in many applications such as speech and image coding. The second paper presents a technique for design of low-delay FIR filter banks by solving a related optimisation problem.

Image segmentation is an important problem in image analysis and understanding. A technique for combined segmentation in spatial and temporal domains is described in the third paper.

As current chairmen of the International Programme Committee of ITI and IWISPA we cannot miss this opportunity to invite the CIT readers to join us at ITI 2001 and ISPA 2001 to enjoy the full variety of contributions and establish valuable personal contacts.

Damir Kalpić, Chairman of the ITI International Programme Committee
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