

Editorial

The collection of articles in this issue presents a sample of the ongoing researches in the wide field of computer science and engineering as well as in the information technology.

In the first article, *Mapping Programs a Torus-like Transputer Network*, P. Kolbezen and P. Zaveršek proposes a torus based architecture which consists of multiple, unidirectional rings. Such transputer-based system becomes very flexible by combining the proposed architecture, an adequate graph presentation, and the allocation algorithms. In this article, some allocation algorithms are considered and an experimental verification of these algorithms is given.

Thresholding is a commonly used method for image segmentation based on grey-level differences between various regions or features of an image. A. Brink in the article *Maximum Entropy Segmentation Based on the Autocorrelation Function on the Images Histogram*, proposes a method using the histogram autocorrelation function as a measure of the grey-level inter-dependence. The author describes two methods of maximizing the class entropies and gives some typical experimental results.

In the third article, *A Multiprocessor System for Performing Mail Sorting in Real Time*, D. L. Andrews, R. Brown, C. Caldwell and A. R. Hennessey describe a special purpose embedded multiprocessor architecture developed for performing real time multi-line optical character recognition.

The integration of expert systems with neural networks is described in the article *A Cooperative Approach to Integrating Expert Systems with Neural Networks*. The authors P. Frič, J. Šefčík and V. Vojtek give a brief introduction into the knowledge-based system technology state of the art and highlight the basics of the neural networks technology. An approach to the integration of expert systems and neural networks is proposed in this article.

In the fifth paper, *An Approach to Register Number Determination Based on Simulation of Register Allocation via Graph Colouring*, B. Dalbelo Bašić describes a simulation of the register allocation procedure via graph colouring and discusses the necessary number of processor registers for storing variables within a single procedure.

In the paper *Using Hypertext to Implement Multiple Tutoring Strategies in an Intelligent Tutoring System for Music Learning*, M. C. Angelides and A. K. Y. Tong describe the SONATA, a music theory tutoring system which is implemented by using a hypertext tool HyperCard II.1.

C. Jones in the article *Bringing LP to Life* describes a system designed to help students learn the basics of Linear Programming (LP).

The issue concludes with four book reviews.

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