

PREFACE

Nulla dies sine linea. Plinius

I have the privilege of editing these Proceedings as the guest - editor. The editorial board has tried to contribute and make some improvements. All the articles are in English in order to make the Proceedings more accessible to the readers abroad.

This number of Proceedings features eight articles. Seven of them were presented at the Information Systems '97 Symposium, held in Varaždin in September 1997, and the eighth one is the paper by Ivan Lončar, being in the sphere of mathematics, and was not presented at the Symposium. Four of the published papers appear to be scientific paper, three are review article and one is preliminary communication. Two of the papers deal with problems of information system planning, two analyse artificial intelligence, one refers to the Internet, one discusses the object oriented technologies of software engineering. The aforementioned paper in mathematics elaborates the issue in the area of topology.

First of all we give short descriptions of the four scientific papers.

In the article *Optimal Scheduling Using Constraint Logic Programming* Jan Paralič, Július Csontó and Milan Schmotzer describe the new strategy of finding optimal solutions referring to the distribution applications. The aforementioned new strategy of finding optimal solutions consists of three steps. First, the initial quality solution is found through heuristic method, then heuristics is used to find the bottom limit, and finally the developed strategy is used to find optimal solution within minimum number of steps.

In the article *Strategic Planning of Information Systems* Josip Brumec gives a new outlook on the problem of a relatively poor impact of information technologies upon effectiveness of business systems. The first step of a life cycle - strategic planning, is pointed out as one of the most important factors. New approaches which enable an assessment of information systems and information technologies effectiveness in companies are suggested.

The article *Survey of the State and Future Trends of Intelligent Systems* by Božidar Kliček presents the results of a research into present state and trends of intelligent systems. Based on the research results a proposal of a macro model of the whole area has been made. It should become a necessary component in research and application projects dealing with artificial intelligence. The research has been carried out through an analysis of a large amount of information from the Internet, which has been inaccessible in the other media so far and for whose purpose a new original method of searching for and information structuring has been created.

The article by Ivan Lončar *Inverse Limit of Continuous Images of Arcs* presents the results of a research into inversion limits of continuing arcs. Two proofs, regarded as a scientific contribution, referring to the arc image properties and the limits for which these properties are valid, have been produced.

This number of Proceedings also contains three review article.

In the article *Information Systems Planning: Towards the Sustainability of Competitiveness* Gareth Griffiths and Ray Hackney elaborate the processes which are contained within the information system strategy. The exceptional contribution of this article lies in the creation of frames where organisations can assess implications, development and possible changes for their applications of information systems. The article gives a survey of literature as well as a model illustrating significant competitive factors resulting from information system implementation.

Authors of *Software Reuse by Using Components*, Matjaž Jurič, Marijan Heričko, Ivan Rozman and József Györkös, point out an enormous potential of object oriented technology. The paper aims to show how to achieve software reuse by means of component technology, surveying the idea of component technology, method of support of interface reuse, and possible applications and drawbacks are indicated as well.

In the article *Databases on the Internet* Dragutin Kermek describes the use of the Internet, in particular World Wide Web. A project which aims at creating a solution for storing data on the Internet and later reading of the same is described. Some solutions to the problems appearing in the course of the project are suggested.

Research report by Jusuf Šehanović and Miroslav Žugaj titled *District Information System* describes some problems of the the new territorial structure of the Republic of Croatia, particularly on the local management level. The importance of district information system building is particularly stressed and one concept to serve this purpose is suggested.

I hope that this number of Proceedings has met your expectations in terms of its contents quality as well as a great number of topics. In accordance with our starting motto we shall be making constant efforts to improve our future magazine in the years to come.

Guest Editor:

Božidar Kliček