

Editorial

Welcome to this sample set of papers (out of 100+) originally published in the ITI (Information Technology Interfaces) 2003 Conference Proceedings. Ordinarily, it can be a quite frustrating and difficult task to select a representative set of articles for the CIT Journal. However, this year it was relatively easy because we chose to use the following criteria and everything else pretty much fell in place:

- a) Invited speaker articles (submitted as full papers) were automatically included.
- b) Those articles that received top ratings from both of the international reviewers were included next, and
- c) To achieve a balance commensurate with the number of articles submitted for each of the Conference topics, at least one paper was selected for (nearly) each of the topical areas.

Basically, each of us used the above criteria independently to assess every submission and then coordinated our individual selection lists for the final set. We hope that you'll find the "distilled" set of this year's intellectual interfaces as interesting and informative as we did.

This year's culled list starts with two invited papers on qualitative data mining and its applications, by Ivan Bratko and Dorian Šuc, and another on component-based software engineering by Ivica Crnković.

The next article, presented by Zoran Bekić, captures the spirit of this year's special topic on the "Computer at the University" by offering a view of the evolving role of university computing centers – a trend toward a variety of networking, computing and educational services.

The remaining articles are in general order of most abstract to most applied.

Statistics has always been an important topic within the ITI conference because of its importance in decision making. Papers dealing with the theory and application of statistical methodology have been presented at all of the past 25 conferences, and statistical papers are commonly selected for publication in CIT Journal. This year, we chose an interesting article by Mario Coli et al. who considered issues involved in order selection of spatial and temporal autoregressive models with errors in variables.

In the article presented under the "Theory of Computing and Computing Methodologies" topic, Robert Manger and Goranka Nogo offered their solution to sparse symmetric path problems on a network of computers.

Two articles selected from the "Modelling and Optimization" topic both employ evolutionary algorithms. Istvan Borgulya introduces a new evolutionary method to solve the 3-SAT problem, whereas Daniel Danciu addresses an evolutionary approach to solving a particular class of highly constrained timetabling problems.

The next two papers represent conference contributions to the "Intelligent and Multi-Agent Systems" topic. The paper by Slobodan Ribarić and Tomislav Hrkać describes an object-oriented simulator that has the aim of mobile object behavior analysis in dynamic computer vision scenes. The other article under the same topic, authored by Mitja Luštrek and Matjaž Gams, presents an advanced intelligent system for playing a three-player tarok card game, with implications for decision making under uncertainty.

The paper presented by Simona Colucci et al., reported under the “Networking, Middleware and Distributed Platforms” topic addresses the problem of matchmaking for web services from a knowledge representation perspective.

A popular topic at the ITI Conference: “Databases, Data Warehousing and Information Systems” attracted many contributors again this year. We decided to select the article by Mario Pranjić et al., that describes a novel approach to the prototype implementation of a multi-level secure relational database model, and a paper by Frank Bensberg, that proposes the Balanced Scorecard concept as a controlling instrument for data warehousing systems.

The well structured paper by Radmila Jurić was selected primarily because of the fundamental importance and relevance (for anyone involved in ICT education) of the major issue it addresses: the revalidation of Information System Curricula courses.

Last but not least, the article by Poppy Pickard et al. (a selection from the “Distance Education and Internet Collaboration” topic) gives a comprehensive and pragmatic overview of experiences with on-line dynamic learning objects and their effectiveness impact (15–20% increase in pass rates) for an introductory programming module.

ITI 2003 marked the jubilee (25th) Conference and as such saw an increase in both the quality and quantity of contributions to all of the broad areas that ITI encompasses, contributed by many excellent authors from around the world.

We hope to continue this trend of continuous improvement with a few variations planned for ITI 2004. We will introduce a “Best student paper award” competition, aimed at attracting articles from promising young research scholars. Also, next year’s special topic “ITI in the Century of the Gene: Challenges and Opportunities” is sure to stimulate new thinking that we feel will foster cross disciplinary research and motivate new fertile interfaces within this fascinating, fast track growth research area.

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