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Introduction

Modern times are characterized by many dichotomies. One such dichotomy is formed by specialization as opposed to synthesis, unification. The academic community worldwide is increasingly stressed by various institutions to document its activity and swarm its productivity, which in turn leads to fragmentation and specialization of the research. In the case of the loosely-denoted area of computer science, this overgrowth of results has produced in many cases duplications with affine areas such as mathematics, physics, biology and others.

On the other hand, precisely in the times of rapid and extensive growth, there is a need for a synthesis. We believe that interdisciplinary synthetic trends are more needed than ever, and they have to be actively encouraged. The main motivation of this new journal is to fill this gap by providing the possibility for a broad and widely distributed forum. Among the new possibilities that *Computer Science Review* will incorporate is the possibility that authors periodically update electronically their contributions, making each published paper an ongoing dynamically-evolving survey on the selected topic.

Ambitiously we want to cover contemporary computer science in all its research aspects in an open and unbiased way. We shall publish expository articles on contemporary research activity in the whole computer science. We hope that these surveys will be written in a way that is accessible to nonexperts in a particular area and which will provide initial insight to the general community. The journal will contain survey papers and thorough reviews of books. We intend to

publish other material that will increase the contextual value of the published articles, in the form of short introductions to the survey papers by members of the community who have played a historical role in the development of the topic under survey. This is work in progress and only time will show how the project develops, but we hope that it will evolve in ways the community will enjoy. In the present first issue of CSR, there is a short historical note on the use of spectral methods in graph theory by Miroslav Fiedler, followed by a survey on clustering by Satu Elisa Shaeffer. The second survey is due to Raphael Yuster on graph packing and graph decomposition. The third survey deals with sampling-based robot motion planning, and it is written by K.I. Tsianons, I.A. Sucan and L.E. Kavraki. In addition, there are two book reviews, one by Pablo Jimenez on *Principles of robot motion. Theory, algorithms and implementations* by Choset et al., and the other by by Mika Hirvensalo on *An introduction to quantum computing* by Kaye et al. We aim to make the book reviews an attractive feature in each issue of CSR.

We believe that despite all the rapid, and sometimes hectic, development there is a substance and tranquility. In this context we also feature selected illustrations on the cover of the journal.

We thank all our editors and all people who have made possible the appearance of this journal.

J. Díaz

J. Nešetřil