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Foreword

2004 Symposium on String Processing and Information Retrieval

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This issue of the Journal of Discrete Algorithms contains a small sample of the papers presented at the 11th International Symposium on String Processing and Information Retrieval (SPIRE 2004), which was held in Padova, Italy, during October 2004. SPIRE has its origins in the South American Workshop on String Processing, which was first held in Belo Horizonte, Brazil, in 1993. Beginning in 1998, the symposium expanded its topics which now encompass all algorithmic, modeling, evaluation and application issues of information processing both from the string processing and information retrieval perspectives.

The four papers presented in this issue were chosen among the best original submissions to the conference, which were subsequently expanded and revised according to a careful and thorough review process. The selection was based on scientific merit, technical value, and perceived relevance to the readership of this journal.

All of the papers address problems of pattern matching and discovery. The first paper is contributed by Amir Butman, Lewenstein, Porat and Tsur. It presents an efficient algorithm for real scaled two-dimensional matching. The second paper is by Backofen and Siebert. These authors address the problem of discovering patterns shared by RNA molecules and consisting of exact sequences and higher structures. In the third paper, Iliopoulos, Perdikuri, Theodoridis, Tsakalidis and Tsihlias design three algorithms for motif identification in weighted biological sequences. The fourth and last paper, by Lee, Iliopoulos and Park, presents a linear time algorithm for the “longest common repeat” problem.

The interested reader may find interest also in the companion special issue, devoted by Elsevier's Information Systems Journal to some of SPIRE 2004's best papers in Information Retrieval.

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