Preface Algorithms and Computation (ISAAC 2012)

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Received: 8 August 2014 / Accepted: 11 August 2014 / Published online: 29 August 2014 © Springer Science+Business Media New York 2014

This special issue of Algorithmica contains extended versions of selected contributions to The 23rd International Symposium on Algorithms and Computation (ISAAC 2012) held in Taipei, Taiwan, on December 19-21, 2012. The mission of the ISAAC series is to provide a top-notch forum for researchers working in algorithms and theory of computation. The ISAAC 2012 Program Committee selected 68 papers for oral presentation out of 174 high-quality submissions from 33 countries. Among those presented papers, the following three papers in Algorithms have been selected in this special issue. They went through a standard review process of Algorithmica.

The paper "A framework for succinct labeled ordinal trees over large alphabets" considers succinct representations of labeled ordinal trees that are able to handle large alphabets. The new representations also provide a much broader collection of operations than previous work.

The paper "The minimum vulnerability problem" considers the problem of finding k paths with a minimum number of shared edges between two vertices of a graph. The authors present several interesting algorithms including a k/2-approximation algorithm, improving the best previous approximation factor of k-1.

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The paper "Strong conflict-free coloring for intervals" considers the k-strong conflict-free coloring of a set of points on a line with respect to a family of intervals. Exact and approximated algorithms are provided for solving this problem.

We wish to thank all authors and anonymous referees for their great contribution.

