EDITORIAL

Special Issue Dedicated to 16th International Conference and Workshops on Algorithms and Computation, WALCOM 2022

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This special issue of *Algorithmica* includes full journal versions of six papers selected from the papers presented at the *16th International Conference and Workshops on Algorithms and Computation* (WALCOM 2022) held at the Universitas Jember, Jember, East Java, Indonesia during March 24–26, 2022. Only a few papers among the highly-ranked ones were invited for the special issue based on their merits and relevance to Algorithmica. The invited papers have gone through a rigorous refereeing process of Algorithmica to ensure its high publication standards.

The paper by H. Eto, T. Ito, E. Miyano, A. Suzuki and Y. Tamura has studied the complexity of Maximum Happy Set on sub-classes of co-comparability graphs; co-bipartite graphs, interval graphs, permutation graphs, and d-trapezoid graphs. Their presented dynamic programming algorithm is elegant and non-trivial.

K. Kobayashi, G. Lin, E. Miyano, T. Saitoh, A. Suzuki, T. Utashima and T. Yagita in their paper consider the problem of covering graphs with vertex disjoint paths while optimizing the cost/profit based on a function on the path length provided as an input. The authors show that the model can capture various known problems as a specialization.

The paper by G. Cordasco, L. Gargano and A. A. Rescigno is a very interesting paper which introduces the influence immunization problem on networks under the

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threshold model and analyzes its parameterized complexity. They consider several parameters and show that the problem remains intractable with respect to each one.

G. Berthe, B. Martin, D. Paulusma and S. Smith perform a systematic study of the complexity of $L(p,q)$-edge-labeling and give complexity theoretic results about the problem of $L(p, q)$-edge-labeling for many combinations of p and q in their paper.

In the paper by J. Ani, E. D. Demaine, Y. Diomidov, D. Hendrickson and J. Lynch, the authors consider a motion planning framework where an agent traverses a graph of "gadgets," each with a set of tunnels the agent may traverse. Extending the reachability problem, the authors consider the problems of universal traversal and reconfiguration.

A. Agrawal, P. Choudhary, N. S. Narayanaswamy, K. K. Nisha and V. Ramamoorthi consider a variant of dominating set problem called the Minimum Membership Dominating Set (MMDS) problem in their paper which gets as input a graph and an integer k and investigate whether there exists a dominating set (of arbitrary size) such that the closed neighborhood of every vertex contains at most k vertices from the dominating set. The authors study the classical and parameterized complexity of the problem.

Many thanks go to the authors for contributing their high-quality papers, to the reviewers for their excellent professional service, and to the editors of Algorithmica for making this special issue possible. We thank Slamin, Anton Prihandoko, Dafik and their team for their tireless efforts in organizing WALCOM 2022 in Indonesia.