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## Editorial

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**Biographical notes:** Yingshu Li is currently an Assistant Professor in the Department of Computer Science at Georgia State University. She received her PhD and MS degrees from the Department of Computer Science and Engineering at University of Minnesota-Twin Cities. She received her BS degree from the Department of Computer Science and Engineering at Beijing Institute of Technology, China. Her research interests include optimisation in networks, wireless sensor networks, wireless networking and mobile computing, approximation algorithm design and computational biology. She is the recipient of an NSF CAREER Award.

Ion Mandoiu is an Assistant Professor at University of Connecticut. He received his PhD degree from Georgia Institute of Technology. His research interests include applied algorithms, bioinformatics and computational molecular biology, computer-aided design & manufacturing of integrated circuits, and ad-hoc wireless networks.

Alexander Zelikovsky received the PhD degree in Computer Science from Belorussian Academy of Sciences in 1989 and worked at the Institute of Mathematics (Moldova), University of Virginia and UCLA. He is a Professor of Computer Science at Georgia State University which he joined in 1999. His research interests include discrete algorithms and applications in bioinformatics, VLSI CAD and wireless networks. He has authored more than 160 refereed publications which won SIAM Outstanding Paper Prize and numerous best paper awards. He is a founding co-chair of two international conferences and serves on editorial boards of five international journals.

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This special issue of the *International Journal of Sensor Networks* contains four selected papers that were presented at the 2nd ACIS International Workshop on Self-Assembling Wireless Networks (SAWN 2006) in conjunction with the 7th ACIS International Conference on Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing (SNPD 2006), held in Las Vegas, Nevada, USA, on 19–20 June 2006.

SAWN provides a forum for the exchange of ideas and results among industry practitioners and researchers working in the emerging area of self-assembling wireless

networks. Original research papers and state-of-the-art surveys were solicited on all aspects of self-assembling wireless networks, including, but not limited to: modeling and optimisation of heterogeneous self-assembling wireless networks, authentication, privacy, and security, dynamic networks and dynamic graph algorithms, dynamic frequency and channel assignment, multi-hop routing in heterogeneous ad hoc and sensor networks, multi-path forwarding for fault tolerance, wireless multicasting, performance of end-to-end protocols over wireless networks, data aggregation and management, caching and prefetching for information access

in wireless networks, mechanisms design and cooperation enforcement, synchronisation and scheduling issues in ad hoc wireless networks, resource management in mobile, wireless and ad hoc networks, energy saving protocols for ad hoc and sensor wireless networks, monitoring management in sensor networks, mobility and location management, and algorithms for multimedia QoS and traffic management.

Following a rigorous review process, the programme committee has selected an outstanding set of nine papers for publication in the proceedings and oral presentations at the workshop. Among these nine accepted papers, four were invited to submit their full versions to this special issue.

We would like to thank the authors for submitting and revising their work, and PC members and additional referees for their careful reviewing.