Special issue dedicated to 2020 IEEE president, professor Toshio Fukuda's 74th birthday[*]

 This special issue is dedicated to Professor Toshio Fukuda's 74th Birthday, in recognition of his profound contributions to the interdisciplinary field of Multi-scale Robotics based on the Cellular Robotic System, CEBOT, which is the basic concept of the emergence of intelligence in the multiscale way from cellular level to organizational level, proposed more than 30 years ago. It consists of many elements how the system can be structured from the individual to the group/society levels in analogy with the biological system. He is also known as a pioneer in the field of micro-robotics technology including the micro-sensors and micro-actuators that can make the miniature systems possible. Furthermore, his medical intravascular micro-surgery simulator has found commercial uses. He has supervised more than 100 Ph.D. students, as the next generation of worldwide researchers in the above research fields.

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[*]Communications in Information and Systems (CIS), International Press, http://www.ims.cuhk.edu.hk/cis/.

He has actively served IEEE. He was the IEEE President (2020), IEEE Life Fellow, and the founder of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS). Started in 1988, IROS is now one of the largest and most influential robotics research conferences worldwide. Currently, he is the Program Director for the Moonshot Goal 3 "Realization of AI robots that autonomously learn, adapt to their environment, evolve in intelligence and act alongside human beings, by 2050" started as a bold new research and development program driving disruptive innovation in Japan. His breakthrough in the research will never end.

We endorse this issue in recognition of ongoing efforts of a vibrant scholar.

Guest Editors

Stephen S-T. Yau
Tsinghua University
syau@math.tsinghua.edu.cn

Hisao Ishibuchi
Southern University of Science and Technology
hisaoi@cs.osakafu-u.ac.jp

Naoyuki Kubota
Tokyo Metropolitan University
kubota@tmu.ac.jp