Special Issue on Collection, Processing, and Applications of Measured Sensor Signals

Preface

With the rapid progress of industrialization in recent years, a wide variety of sensors have been applied in industry. For this reason, the collection and processing of sensed signals have played a crucial role in related automation fields. This has driven progress beyond traditional mechanization. Furthermore, Industry 4.0 techniques are bringing modern engineering into a new era. Therefore, more complex problems, such as in automatization, robotics, mechatronics, measurement, and control systems, can be resolved by using signal collection and processing algorithms more efficiently.

All the papers in this issue are based on novel methodologies and implementations, creative and innovative automation systems, and integrated engineering associated with crucial fields. Four major topics are focused on: 1. Material and component tests. 2. Deep learning in measurement using sensors. 3. Development of IoT sensor networks. 4. Sensor applications in different areas. Many valuable solutions have been presented covering both theory and applications in the field of sensors and materials.

As a guest editor, I would like to congratulate all authors for their outstanding research outcomes and their significant contributions. I am also grateful to Ms. Misako Sakano and Naoko Makino for their assistance in the publication of this special issue.

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