# Editor's Message to Special Issue on Embedded Systems Engineering

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Embedded systems support our social life and industries as "brains" in a wide variety of electronic products such as automotive vehicles, home appliances, industrial equipment, telecommunication, and IoT devices. Research and development for these systems require innovative ideas to integrate overall technologies from hardware to software, from fundamentals to applications, since embedded systems have to realize new services and features under severe physical and economic constraints. Establishing and advancing embedded system engineering is crucial not only to develop better products but to keep the competitiveness of industries. Although Japan allegedly has some strength in the embedded system industry, overseas research activities for embedded systems, mainly in Europe and the U.S., have rapidly progressed, and a large number of outcomes have been published. It is critical to vigorously promote research in universities and research institutions in Japan.

Due to various influences from the COVID-19 infection, educational institutions, including elementary schools, offer online lectures, and even companies, online meetings, or remote works are conducted. Moreover, in order to avoid congestion at restaurants, a technological development that enables remote processing as much as possible, such as the introduction of a serving robot, is being promoted. Under such circumstances, since embedded technology is indispensable in the future, it is our mission to publish research achievements related to embedded software and hardware technology in this changing world.

In this special issue, we called for papers from industry and academia on a broad range of areas, including hardware and software technologies, project management, and human resources and educations related to embedded systems. Especially, we encouraged to submit papers presented in the "Asia Pacific Conference on Robot IoT System Development and Platform (APRIS)," sponsored by the Special Interesting Group on Embedded Systems in the Information Processing Society of Japan.

The number of the submitted papers is 5, and 1 excellent paper has been accepted. Each paper was assigned to a meta reviewer selected from the 22 editorial committee members shown below to conduct peer-reviewing.

We should accelerate to establish embedded system technologies through collaboration between industry and educational institutions. Since the special issues activate the collaboration, we plan to continue publishing them twice a year.

We would like to express our sincere appreciation to all the authors and reviewers for their contribution in spite of a short reviewing period.

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