

**SPECIAL ISSUE ON SUPPORT SYSTEMS FOR
HUMAN ENVIRONMENT UTILIZING SENSOR TECHNOLOGY
AND IMAGE PROCESSING INCLUDING AI, PART 1**

PREFACE



More than eight billion people live on Earth, working together, living lives, forming communities and countries. The human environment is deteriorating and various problems are arising as the population increases. Research and development are necessary to solve these issues and to create an environment where people can live in a way that enriches their mind and body. It is necessary to transmit and process various information about the human environment in order to live a rich life. The environment can be broadly divided into three categories: the natural environment, social environment, and living environment. These three environments are steadily deteriorating. The climate change caused by global warming and other factors is an important issue that requires urgent consideration and the development of academic solutions. It is causing major disasters such as earthquakes, heavy rains, and typhoons inflicting great damage to the human environment.

The mental and psychological burden on humans increases as technology advances and human life becomes more prosperous. Although living and social environments have improved materially, there are still many aspects in which people are unable to achieve spiritual and psychological satisfaction. There is particularly an urgent need to improve the human environment, which affects people's health, safety, comfort, and convenience. Furthermore, the social environment such as public safety, welfare, education, culture, and community ties, are important issues.

This special issue has drawn special papers on the technologies that will improve the human environment and create a richer human environment both physically and spiritually. This rich human environment will be created by utilizing cutting-edge technologies such as sensors, IoT, AI, and image processing. Sensors and their peripheral technologies correspond to human senses, can support thinking, and contribute particularly to maintaining a healthy mind and body. This information plays an important role in both the material and spiritual aspects of human beings. The fusion of technologies from these fields creates new value, leads to innovation, and contributes to the improvement of the human environment. There is a strong demand for innovation that is physically and mentally healthy and socially fulfilling. The guest editor sincerely hopes that this special issue will help create a livable rich human environment. The contributed papers are published in two issues.

Lastly, the editor sincerely thanks Ms. Momoko Kawamura, Editorial Department of MYU K.K., for her kind support in the publication of this issue, especially in editing work.

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