

Guest Editorial: Special Issue on Selected Papers from ICASI 2023

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The COVID-19 pandemic has brought significant changes to the scientific and technological community, and it is likely that some of these changes will continue to impact the community in the post-epidemic era. Here are some potential outlooks for the scientific and technological community in the post-epidemic era:

1. Increased investment in research and development: The pandemic has highlighted the importance of research and development in the field of healthcare and medicine. Governments and private organizations are likely to increase their investment in research to develop new treatments, vaccines, and medical technologies.
2. Emphasis on remote work and collaboration: The pandemic has forced many scientists and researchers to work remotely, and this trend is likely to continue even after the pandemic. Remote work has shown that it is possible to collaborate effectively online, which could lead to increased collaboration across borders and time zones.
3. Greater use of data analytics and AI: The pandemic has generated an enormous amount of data, which can be used to develop insights into the virus and its effects. Scientists and researchers are likely to use data analytics and artificial intelligence (AI) to analyze this data and develop new treatments and technologies.
4. Greater focus on public health: The pandemic has highlighted the importance of public health, and this is likely to continue in the post-epidemic era.
5. Increased awareness of the importance of science: The pandemic has made the public more aware of the importance of science and its role in addressing global challenges. This increased awareness is likely to lead to increased support for scientific research and development.

Overall, the post-epidemic era is likely to see significant changes in the scientific and technological community. These changes are likely to be driven by a greater emphasis on public health, increased investment in research and development, and greater use of data analytics and AI.

This special issue selected 5 papers from “2023 IEEE 9th International Conference on Applied System Innovation (IEEE ICASI 2023)”. This special issue provides a systematic overview and state-of-the-art research in Internet Technology, Computing, IoT and Computer Engineering Technology, with a special focus on artificial intelligence (AI), and internet of things (IoT) and will outline new developments in

fundamental, approaches, methodologies, software systems, and applications in these areas. The aim is to discover new scientific knowledge relevant to IT-based Intelligent Electrical/Mechanical Systems, Mechanics, Human-Computer Interaction (HCI) and Design Innovations.

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Guest Editors



Liang-Wen Ji was born in Taipei, Taiwan, in 1965. He received the B.S. degree in physics, the M.S. degree in material science, and the Ph.D. degree in microelectronics from National Cheng Kung University (NCKU), Tainan, Taiwan. In 2005, he became Associate Professor with the Institute of Electro-Optical and Materials Science, National Formosa University (NFU), Yunlin, Taiwan, and was promoted to Full Professor in 2007. Dr. Ji has become Distinguished Professor of National Formosa University since 2019. From August 2005 to July 2006, he served as the Director of the R&D Center for Flat Panel Display Technology, NFU. His current research interests include semiconductor physics, optoelectronics, nanotechnology, and internet of things (IoT). Dr. Ji was a recipient of the Research Award from Lam Research Taiwan Co., Ltd., Taiwan, in 2004. He has become a Fellow of the Taiwanese Institute of Knowledge Innovation (TIKI) since 2014, and a Fellow of the Institution of Engineering and Technology (IET) since 2023.



Sheng-Joue Young was born in Tainan, Taiwan. He received the B.S. degree from the Department of Physics, National Changhua University of Education, Changhua, Taiwan, in 2003, the M.S. degree from the Institute of Electro-Optical Science and Engineering from National Cheng Kung University, Taiwan, in 2005, and the Ph.D. degree from the Institute of Microelectronics, National Cheng Kung University, in 2008. He was a Visiting Research Student with the Graduate School of Engineering,

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Chiba University, Chiba, Japan, from July 2007 to September 2007. In 2010, he became an Assistant professor with the Department of Electronic Engineering, National Formosa University, Yunlin, Taiwan. He was promoted to an Associate Professor in 2013. From August 01, 2020, he transferred to become an Associate professor with the Department of Electronic Engineering, National United University, Miaoli, Taiwan. His current research interests include semiconductor physics, optoelectronic devices, and nanotechnology. He has published more than 100 SCI and EI papers in recent years.



Siu-Tsen Shen has studied widely, gaining her Master degree in Industrial Design Research from the Design Academy of Eindhoven, and her PhD in Design from Goldsmiths College, University of London. She has been a visiting professor at UCL and Middlesex University, UK and is currently a Professor in Multimedia Design

at the National Formosa University, Taiwan. Her research interests lie in the areas of HCI, User-Centred Design, Cross-Cultural Research, User Interface Design, and Design Team Formation using Personality Type. She is an editor in chief in *Journal of Multimedia, Art, Design and Education* (ISSN 2634-1395) and *Journal of Cultural and Creative Industries Research* (ISSN 2221-6170). She is the General Co-Chairman and leads a technical committee for Innovation in Design, Communication and Engineering (IEEE ICICE) since 2012, and International Conference on Applied System Innovation (IEEE ICASI) since 2015.



Stephen D. Prior is a drone expert, engineer and educationalist who leads a multidisciplinary research group at the University of Southampton. His innovative work on drone design builds on his personal experience as an engineer and scientist. Stephen has built an unorthodox and creative team of aeronautical

engineers, design engineers and robotic experts. Stephen has an international profile as an academic and conference chair. He publishes widely and speaks frequently at national and international events. He is especially interested in collaborative research at the intersections between traditional disciplinary boundaries and brings his considerable knowledge and insight to thinking on unmanned systems and the future of aircraft.