## **FOREWORD**

The 12th International Symposium on Information and Communication Technology (SOICT 2023) is held on December 7-8, 2023, in Ho Chi Minh City, Vietnam. SOICT 2023 is an international academic forum for researchers and graduate students to share their latest research findings and to identify future challenges in computer science.

SOICT 2023 has received papers from 25 countries and regions in four major areas of research including AI Foundation and Big Data, Networking and Communication Technologies, Multimedia Processing, and Software Engineering, in addition to special sessions on Operations Research for Sustainable Urban Development, Artificial Intelligence and Data Science for Smart Health and Medicine, Recent Advances in Cyber Security, Human Computer Interaction and Intelligent Interactive Systems, and Lifelog Event Retrieval. The Program Committee has followed a formal standard reviewing process; bidding, reviewing, and deliberating for selecting 75 papers for regular presentation, and 61 papers for poster presentation and publication in the proceedings. It is our great honor to receive World-class invited speakers: Nabil Absi (École des Mines de Saint-Étienne, France), Tzung-Pei Hong (National University of Kaohsiung, Taiwan), Ravishankar K. Iyer (University of Illinois at Urbana-Champaign, United States), Hans-Jürgen Zepernick (Blekinge Institute of Technology, Sweden), and Shengdong Zhao (National University of Singapore, Singapore).

We would like to thank the Program Committee members for their great responsibility in reviewing papers, and all track chairs for actively monitoring the review and deliberation process and for proposing decisions on papers: Le Hoai Bac (University of Science, VNU-HCM, Vietnam), Dominik Bork (TU Wien, Austria), Gérard Chalhoub (University of Clermont Auvergne, France), Chun-Hao Chen (National Kaohsiung University of Science, Taiwan), Trinh Van Chien (Hanoi University of Science and Technology, Vietnam), Trong-Le Do (University of Science, VNU-HCM, Vietnam), Tran Quang Duc (Hanoi University of Science and Technology, Vietnam), Jean-Philippe Gayon (LIMOS, France), Pham Huy Hieu (VinUniversity, Vietnam), Ha Minh Hoang (Phenikaa, Vietnam), Won-Joo Hwang (Pusan National University, South Korea), Nidal Kamel (VinUniversity, Vietnam), Honjo Kim (Yonsei University, South Korea), Nguyen Phi Le (Hanoi University of Science and Technology, Vietnam), Triet Huynh Minh Le (The University of Adelaide, Australia), Tu-Khiem Le (Dublin City University, Ireland), Duc Tien Dang Nguyen (University of Bergen, Norway), Hai-Dang Nguyen (University of Science, VNU-HCM, Vietnam), Kien Nguyen (Chiba University, Japan), Phuong Nguyen (University of L'Aquila, Italy), Thanh Hai Nguyen (French Alternative Energies and Atomic Energy Commission (CEA), France), Thuy Nguyen (RMIT University, Vietnam), Viet Hung Nguyen (Clermont Auvergne University, France), Vu Nguyen (University of Science, VNU-HCM), Tu V. Ninh (Dublin City University, Ireland), Klaus Schöffmann (Klagenfurt University, Austria), Zhao Shengdong (National University of Singapore, Singapore), Yasufumi Takama (Tokyo Metropolitan University, Japan), Quan Thanh Tho (Ho Chi Minh City University of Technology, Vietnam), Nguyen Van Tam (University of Dayton, United States), Pham Quoc Viet (University of Dublin, Ireland), Kok-Seng Wong (VinUniversity, Vietnam), Jingfeng Zhang (University of Auckland, New Zealand), and Liting Zhou (Dublin City University, Ireland).

In particular, we would like to thank all Organizing Committee members, who have worked hard to ensure the best quality of the symposium.

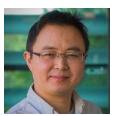
We are grateful to Vingroup Innovation Foundation (VINIF), Samsung R&D, and Momo for their financial supports. Finally, we hope that the SOICT 2023 conference would provide an interesting and up-to-date scientific program. We would like to thank all authors and participants for making SOICT 2023 a memorable and enjoyable academic event in Ho Chi Minh City, Vietnam.

Together, let's make the SOICT 2023 Conference a successful event!

SOICT 2023 Program Co-Chairs



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