

Message from the General Chairs and PC Chairs

TPS-ISA 2023

Advancements in computing and information technologies, including IoT, mobile/edge/cloud computing, cyber-physical-social systems, and artificial intelligence/machine learning/deep learning, have opened the door to creating smart and intelligent systems. These systems can have a transformative impact on society by accelerating scientific discoveries and innovations. These new technologies are becoming increasingly integrated into our personal, organizational, and social processes through computing platforms and networked information systems. It is crucial that we address trust, privacy, and security concerns in these digital environments to ensure the safety of individuals and society as a whole.

The Fifth IEEE conference on Trust, Privacy, and Security in Intelligent Systems and Applications (IEEE TPS 2023) is an international multidisciplinary forum for presenting state-of-the-art innovations and facilitating discussions among academic researchers, industrial professionals, and practitioners. The conference focuses on topics related to trust, privacy, and security in emerging smart and intelligent systems as well as applications.

The IEEE TPS 2023 technical program includes 1 keynote, 1 plenary panel, and 47 papers comprising regular research papers, vision papers, and application papers. The topics of interest encompass foundational theoretical models for trust, privacy, and security in emerging smart and intelligent systems and applications. These include trusted AI, privacy-preserving and secure machine and deep learning; networks/infrastructures; IoT security and privacy; trustworthy secure human-machine collaboration; access management/negotiation of trust; bio-inspired approaches and game-theoretical approaches to trust, privacy and security; adversarial machine learning algorithms; fairness, integrity and robustness in AI; safe and trusted autonomous vehicles; data quality and provenance and blockchain distributed-ledger technologies.

We take this opportunity to thank all the authors who submitted their work to the conference. We thank the entire conference organizing committee for their hard work on logistics and proceedings and publication matters. Especially we would like to thank Coordination Chairs: Shu-Ching Chen from University of Missouri-Kansas City, USA and Amir Masoumzadeh from SUNY, Albany. Vision Track Chairs: Elisa Bertino from Purdue University, USA, Paolo Boldi from University of Milan, Italy and Tarek Abdelzaher from University of Illinois at Urbana Champaign, USA. Industry Track Chair: Ashish Kundu from Cisco, USA, Abhishek Kumar from Google Brain and Frederico Araujo from IBM T. J. Watson Research Center. Workshop Chairs: Runhua Xu from Beihang University, China and Julian Jarrett from Lutron Electronics, Philadelphia, USA & Lecturer, ICPC Director(Jamaica). Publicity Chair: Wenqi Wei from Fordham University, USA. Finance and Local Arrangements Chair: Julian Jarrett from Lutron Electronics, Philadelphia, USA & Lecturer, ICPC Director(Jamaica). Proceedings Chair: Runhua Xu from Beihang University, China. Web Chair: Jingzhe Wang from University of Pittsburgh, USA. We also would like to take this opportunity to thank Ms. Cristina Ceballos from IEEE CS for their excellent support throughout the year; and Mr. Patrick Kellenberger for their support arranging our proceedings in a timely manner. We would like to express our appreciation to the steering committee for its strong support.

We are eagerly looking forward to seeing you all online to welcome you to the IEEE TPS event. We hope you will enjoy this exciting technical program as much as we do.

Sincerely,

Surya Nepal, *Data61/CSIRO, Australia*
Jaideep Vaidya, *Rutgers University, USA*
TPS-ISA 2023 General Co-Chairs

Elena Ferrari, *University of Insubria, Italy*
Balaji Palanisamy, *University of Pittsburgh, USA*
TPS-ISA 2023 Program Co-Chairs