IEEE SMC Launches TCIS – Advancing Trustworthy and Controllable Intelligent Systems

We are excited to announce the official establishment of the IEEE SMC Technical Committee on Trustworthy and Controllable Intelligent Systems (TCIS)! Amid AI's rapid deployment in autonomous driving, intelligent finance and cyber-physical infrastructures, TCIS is dedicated to advancing secure, reliable, transparent and controllable intelligent systems, uniting interdisciplinary researchers, engineers and practitioners to build a platform for collaboration, knowledge exchange and innovation for real-world viable intelligent systems.

Breaking from the traditional performance-centric paradigm, TCIS prioritizes security, robustness and controllability, aiming to expand the theoretical and practical foundations of trustworthy intelligent systems, enhance their core capabilities, foster advances in embodied intelligence and trustworthy decision-making, and promote industry standards and interdisciplinary collaboration. Our mission is to drive foundational research and engineering practices for such systems in complex dynamic environments, with key research directions covering intelligent system controllability, AI trustworthiness and security, system evaluation and verification, embodied intelligence control, and their advanced applications. We seek to address critical challenges like system safety, interpretable decision-making and cyber threat resilience via cross-field expertise integration.

Our vision is to build a global research ecosystem for the secure, transparent and reliable operation of intelligent systems, supporting their responsible deployment across autonomous systems, smart infrastructure, intelligent finance and future cyber-physical environments.
We invite all interested IEEE SMC members and stakeholders to join TCIS! Stay tuned for upcoming workshops, collaborative projects and updates.

TC Leadership
Chao Shen, TC Chair, IEEE Fellow, Xi'an Jiaotong University, China, chaoshen@xjtu.edu.cn
Peng Shi, TC Co-Chair, IEEE Fellow, The University of Adelaide, Australia, peng.shi@adelaide.edu.au
Levente Kovács, TC Co-Chair, Obuda University, Hungary, kovacs@uni-obuda.hu
Mingcong Deng, TC Co-Chair, IEEE Fellow, Tokyo University of Agriculture and Technology, Japan, deng@cc.tuat.ac.jp
Le Yang, TC Co-Chair, Xi'an Jiaotong University, China, yangle15@xjtu.edu.cn
Yutong Liu, TC Co-Chair, Xi'an University of Architecture and Technology, China, liuyutong@xauat.edu.cn