

CC9. Social Systems

At the time of submission of your paper in PaperPlaza, by first selecting "Social Systems", the following keywords in the right column will be listed. By selecting one of them as your "1st keyword", your paper will be handled and reviewed by the members of the IFAC Technical Committee (TC) shown in the left column. For more on Technical Committees under this theme, please see <https://tc.ifac-control.org/9>.

TC Name	Keywords
9.1. Economic, Business, and Financial Systems	AI for business and economy
	Agent technology for business and economy
	Blockchain
	Business and financial analytics
	Computational economics
	Computational social sciences
	Control in economics
	Cyber physical social systems
	Data-driven decision making
	Decentralized autonomous organizations
	Econometric models and methods
	Financial systems
	Game theories
	Knowledge automation
	Parallel intelligence
	Social computing
	Social manufacturing
	Social resource planning and management
	Social signal processing
9.2. Systems and Control for Societal Impact	Autonomous systems and legal issues
	Cognitive aspects of automation systems and humans
	Cultural impacts of automation technology
	Cyber-physical and human systems (CPHS)
	Decision systems in autonomy and impacts
	Digital twins for demonstrating the benefits of control on societal outcomes
	Environmental, mobility, energy, health and safety implications of automation
	Ethical issues in CPHS
	Explicability and transparency in CPHS
	Human-centered systems engineering
	Human-in-the-loop in multiple time scales
	Mixed automated and manual modes (e.g. multimodality)
	Reversibility of systems
	Social and societal aspects of CPHS, and impact evaluation
	Social networks for automation
	The multitude of humans and autonomous elements
9.3. Control for Smart Cities	Building automation
	Connected vehicles
	Dynamic resource allocation
	Energy and distribution management systems
	Energy storage operation and planning
	Intelligent transportation
	Off-grid buildings
	Renewable energy system modeling and integration
	Smart parking
	Social networks for smart cities
	Urban healthcare
	Urban mobility
9.4. Control Education	Balance issues of theoretical-versus-practical training
	Centralized Internet repository for control education
	Continuing control education in industry
	Control education using laboratory equipment
	E-learning in control engineering
	Internationalization of control education: EU credit-transfer system
	Internet based teaching of control engineering
	Perspectives of e-learning versus traditional learning
	Teaching curricula developments for control and other engineers
	University-industry co-operation in control engineering education
	University-industry cooperation for training control engineers
	Virtual and remote labs
	Virtual classes, departments, laboratories and schools
	e-Cooperative development of course labs and materials
9.5. Technology, Culture and International Stability	Climate change

	Conflict and post-conflict
	Cost-oriented automation
	Criminality
	Digital culture and cultural heritage
	End-of-life management and the circular economy
	Engineering ethics
	Equality, diversity, and inclusion
	Ethnicity
	Forecasting
	Globalisation
	Human values and value systems
	Infrastructure (including energy, telecoms, political, physical, etc.)
	Innovation management
	International development
	Knowledge networks
	Knowledge society
	Managing technological change to improve Stability
	Mechatronic systems in social systems
	Migration
	Modelling complexity
	Modelling social and environmental change
	New technologies for the environment
	Policy and political decision making
	Security and privacy
	Service engineering applications
	Social and environmental sustainability
	Systems theory
	Universal access to technology and the digital divide
	Young engineers in control
	eAgriculture
	eHealth and telemedicine