

Smart X 2017

With the rapid development of information technology and computer science, the human society is becoming smarter. In the intelligent society, anything that can assist to solve the current challenges in business, industry, science, daily life etc., can refer to ‘Smart X’. Smart X includes smart city, smart home, smart grids, smart building, smart forest, smart geosciences, and smart computing, etc. Smart X can help human in various dimensions, e.g., better living with better resources, faster and better decision making, more precise future predicting, and quicker response making to challenges in surrounding environments and so on. However, how to implement Smart X? Today, smart techniques, together with the advances in big data and high-performance computing power, offer us big opportunities and transformative potential for intelligent decisions and predictive services. The major challenges we are facing involves extracting valuable knowledge from big data i.e. smart data for smart X, seeking artificial-intelligence technologies for smart X, devising virtual-reality technologies for smart X, studying creative computing theories and techniques for Smart X, and designing dynamic and globally cooperative infrastructure built upon Smart X. Smart X also leads to a dramatic paradigm shift in our scientific research towards smart-driven computing.

The 2017 International Conference on Smart X (Smart X 2017) is an international forum for scientists, engineers, and practitioners to present their latest research and development results in all areas of Smart X, Big Data, Artificial Intelligence and Virtual Reality. We solicit submissions which invent new techniques, introduce new methodologies, propose new research directions and discuss approaches for unsolved issues. Topics of interest include, but are not limited to:

Track I Smart Systems

- Smart information processing
- Smart transportation
- Data-driven smart city
- Health informatics in smart cities
- Internet of things in smart environments
- Social networking in smart environments
- Technologies and applications in smart forest
- Technologies and applications in smart grids
- Smart geosciences
- Smart multimedia services
- Smart spaces
- Big data and smart data applications
- Smart data mining
- Computing medicine
- Security, privacy and trust in smart systems

Track II Artificial Intelligence Technologies

- Predictive analytic
- High performance computing
- Cognitive computing
- Deep learning
- Deep reasoning
- Reinforcement learning
- Multimodal, multi-instance learning
- Brain-inspired computing
- Semantic technologies
- Knowledge graphs
- Handling uncertainty and incompleteness in big data
- Data intelligence
- Security, privacy and trust in big data

Track III Virtual Reality Technologies

- Tracking and sensing
- Input devices for VR/AR/MR
- Advanced display technology
- Immersive projection technology
- Haptics, audio, and other non-visual interfaces
- Modeling and simulation
- Computer graphics techniques for VR/AR/MR
- Virtual humans and avatars
- Multi - user and distributed VR/AR/MR
- VR systems and toolkits
- 3D interaction for VR/AR/MR
- 3D selection and 3D manipulation
- Locomotion and navigation in virtual environments
- User studies and evaluation
- Perception, presence, virtual embodiment, and cognition
- Teleoperation and telepresence
- Applications of VR/AR/MR

Important Dates (preliminary)

- Paper submission: March 20, 2017
- Author notification: April 20, 2017
- Conference dates: July 21-23, 2017