

This workshop aims to bring together a diverse and multidisciplinary group of researchers interested in intelligent sensors, computer vision, geometric processing, automation and robotics, and encourage the integration of various research streams from automation, smart devices, robotics and other relevant disciplines. The theme is “making smart automation devices and robot systems be able to perceive and learn from the environment, to independently work or provide support in work-intensive, difficult and possibly complex situations, and to gain higher level intelligence like social behavior and cognitions.” The topics of this workshop will cover, but not limited to

- Geometric computing for automation
- Scene understanding of automation
- Smart control architectures of automation
- Intelligent human-robot interaction
- Robots and smart manipulation
- System software for automation
- Security and safety of automation
- Brain mapping and integrated computational model
- Awareness and autonomy for social robots
- Enhanced visual memory
- Visual attention models
- Visual search, understanding and recognition
- Tracking and sensing
- Perception, presence, and cognition
- Navigation for robots
- Multiparty dialogs with robots
- Decision making for social robots
- Personality in social robots
- Vision based locomotion
- Learning through vision
- Cooperation between humans and social robots

Organizations

Workshop Co-Chairs

Charlie C. L. Wang, Delft University of Technology
Xinyu Zhang, East China Normal University

Workshop Committee

Ruigang Yang (University of Kentucky, USA)
Youfu Li (The City University of Hong Kong, Hong Kong)
Javier Alonso-Mora (Delft University of Technology, Netherlands)
Jun Wu (Delft University of Technology, The Netherlands)
Ming-Ming Cheng (Nankai University, China)
Fuchun Sun (Tsinghua University, China)
Dinesh Manocha (University of North Carolina at Chapel Hill, USA)
Darwin Tat-Ming Lau (The Chinese University of Hong Kong, China)
Dangxiao Wang (Beihang University, China)
Peter Hall (University of Bath, UK)
Jianfei Cai (Nanyang Technological University, Singapore)
Shaojie Shen (Hong Kong University of Science and Technology, Hong Kong)
Jia Pan (The City University of Hong Kong, Hong Kong)
Sören Schwertfeger (ShanghaiTech University, China)

Important Dates

January 26, 2018	Paper abstract
January 31, 2018	Full paper
March 16, 2018	Notification of acceptance

The best conference papers will be selected and recommended to further publish in a special issue for IEEE Transactions on Automation Science and Engineering (extension and new review cycle are necessary).

More information about the workshop is available at <http://iccv.org/2018/workshop/>

