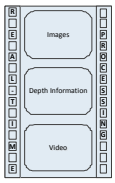
**Special Interest Group for Real-time Processing of Image, Depth and Video Information**




Real-time Processing of Image, Depth and Video Information had become essential for all application fields of image processing and visual pattern recognition. Real-time constraints to the processing of visual information previously set mainly by sensors like cameras or related transmission or broadcasting standards is nowadays challenged by demands for miniaturization and limited computational resources of mobile and embedded systems. On the other hand, all applications that involve human operators as final decision instance within the control loop of image inspection, surveillance and visual pattern recognition determine and limit real-time demands of imaging systems by the psycho-physiological characteristics of the human visual system. Machine vision typically has intrinsic timelines determined by the speed and control of machining and handling of work pieces sometimes below of what computer equipment can perform. Human machine interaction has to consider sensory, haptic and processing latency of both, i.e. humans and machine when defining real-time deadlines. Sonar, X-ray, MRT and laser extend the imaging spectrum not only by their physical principles but also returning 3D structure by depth information of the visual object and scene analysis. High speed camera applications like in destructive testing, e.g. recording impact of car crashes has another real-time scale than MRT brain imaging to be timely integrated in the workflow of a stroke unit in a hospital, where also every minute counts. Finally, autonomous systems using visual navigation, robots' eye-arm-coordination between sensor and end-effector, visually guided driver assistants in automotive, the internet-of-things making use of visual information or multi-media communication by visual input and output have to perform in real-time with respect to the deadlines set by the application.

The purpose of this Special Interest Group is to serve as an information hub for dissemination and exchange of related information on events like workshops and conferences and corresponding publications dealing with the research and development results of "Real-time Processing of Image, Depth and Video Information" for science and industry.