

7th Workshop SDF 2012

Sensor Data Fusion: Trends, Solutions, Applications

Call for Papers

Motivation

To a degree never known before, human decision makers or decision making systems have access to a vast amount of data. For making use of this information potential, real-time data streams must not overwhelm the actors involved. On the contrary, the data are to be fused to high-quality information to provide decision support on various hierarchy levels. Being a challenging exploitation technology at the common interface between sensors, command & control systems, data and information fusion has a large potential for future security and ISR systems (Intelligence, Surveillance, Reconnaissance) in defence and civilian applications.

Scope

Sensor Data Fusion techniques provide higher-level information from multiple sensor data by spatio-temporal data integration, the exploitation of redundant and complementary information, and the available context. This growing branch of applied informatics aims at the production of comprehensive, precise, and near real-time situation pictures, which are basic for further decisions or actions. Important applications exist in logistics, advanced driver assistance systems, medical care, public security, defence, aerospace, robotics, industrial production, precision agriculture, traffic monitoring.

Key Aspects

- Distributed sensor fusion in complex scenarios
- Fusion of heterogeneous sensor information
- Exploitation of non-sensor context knowledge
- Detection & analysis of large scale phenomena
- Performance: measures, evaluation, prediction
- Risk analysis / data driven sensor management
- Case studies of multiple sensor fusion systems

Participants

The workshop addresses end users, software developers, research engineers, and scientists working in the area of sensor data fusion. They get insight into current research trends, innovative algorithms/system solutions, and new applications in a prospering evolving branch of applied informatics.

Contributions

Prospective authors are encouraged to submit high-quality full draft papers (4-6 pages, IEEE format, www.future-security.eu/call_for_papers.html). All submissions are subject to a peer-review process by the technical program committee. Industry participation is much encouraged. Accepted papers will appear on a DVD and be made searchable via the IEEE Xplore data base. At least one of the authors of each accepted contribution is expected to register for Future Security 2012 to be held in Bonn in the former West-German Parliament and to present the paper. For details contact www.fkie.fraunhofer.de/sdf2012 or w.koch@ieee.org.

Important Dates

15.06.2012	Submission of full draft papers
29.06.2012	Notification of acceptance
03.08.2012	Submission of the final version

Organisation

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Technical Program Committee

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