



INFORMATIK 2011 – Informatik schafft Communities

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6th Workshop SDF 2011, Oct. 06 – 07, 2011

Sensor Data Fusion: Trends, Solutions, Applications

Call for Papers

Motivation

To a degree never known before, decision makers have access to a vast amount of data. For making use of this information potential, the real-time data streams must not overwhelm the human beings 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, and the human decision makers, data and information fusion has a large potential for innovative 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 in English. Submit via www.fkie.fraunhofer.de/sdf2011. All submitted papers are subject to a peer-review process by technical program committee. Short versions of accepted papers (6 pages) will be published in print in the GI-Edition Lecture Notes in Informatics; full papers (up to 12 pages) will appear on a DVD and be searchable via IEEE Xplore. At least one of the authors of each accepted contribution is expected to register for the GI Annual Meeting to be held in Berlin and to present the paper. For further details please contact the organizer w.koch@ieee.org.

Important Dates

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| 02. 05. 2011 | Submission of full draft papers |
| 30. 05. 2011 | Notification of acceptance |
| 01. 07. 2011 | Submission of the final version |

Organisation

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Technical Program Committee

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