

# 16<sup>th</sup> International Conference on Information Fusion

Askeri Museum - Istanbul - TURKEY  
9-12 July 2013



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441. Cadde No: 1 Birlik  
Çankaya / Ankara - TURKEY  
P: +90312 454 00 00  
F: +90312 454 00 01  
fusion2013@flap4tour.com.tr

## CALL FOR PAPERS

The 16th International Conference on Information Fusion will be held in Istanbul, TURKEY at the Askeri Museum. Authors are invited to submit papers describing advances and applications in information fusion and encouraged to present unique approaches and examples extending the below listed topics of interest.

Istanbul is a unique and welcoming modern city of great cultural diversity sitting at the gateway between two continents. It is a fascinating city with over 3000 years of recorded history, where many traces of the empires that called this land home are visible today and integrated into the life of the contemporary city. Istanbul is a melting pot where often magnificent mosques and churches stand side by side, where many languages are spoken, a multitude of traditions are followed, and many ethnicities are fused together from Anatolia, the Balkans, the Crimea, the Black Sea and the Aegean.

The Askeri Museum houses military artifacts dating from Turkey's Byzantine and Ottoman past to the modern Republic. The top floor is dedicated to the history of the Ottoman army. It is located in the heart of the city's business and cultural center allowing the visitors easy access to municipal transportation networks as well as some of the well known sightseeing locations.

### Topics of interest include (but not limited to) the following:

#### 1. Theory and Representation

Probability theory, Bayesian inference; fuzzy sets, fuzzy logic; Dempster-Shafer, evidential reasoning, belief functions; logic based fusion, preference aggregation; random sets; neural networks; ontology; category theory.

#### 2. Algorithms

Data Registration, sensor registration; detection, combined detection and tracking; classification, automatic target recognition; nonlinear filtering and smoothing; particle filters, Markov chain Monte Carlo; target tracking and localization; feature aided tracking; data association; video tracking, radar tracking; situation assessment; pattern analysis; behavior modeling; predictive and impact assessment; process management; sensor/resource management; active and passive data fusion; high level fusion; image fusion; hard soft data fusion; database fusion; distributed fusion; data mining; machine learning; vote; data analytics.

#### 3. Modeling, simulation and evaluation

Target modeling; sensor modeling; simulation tools, benchmarks, testbeds; fusion/tracking performance modeling; fusion/tracking performance evaluation, performance metrics.

#### 4. Applications

Sensor networks; defense and intelligence; aerospace; homeland security; public security; computer security; imaging; robotics; navigation and guidance; autonomy; intelligent transportation; logistics; automotive; manufacturing; economics and finance; environmental monitoring; medical care, big data, business intelligence.

**Paper Submissions:** Prospective authors are invited to submit papers electronically via the system found at the conference web page. Paper templates and submission instructions will be available at the conference website. Paper submissions are due by 1 March 2013 and should be no more than eight pages in length. There will be a charge for each additional page beyond eight pages. All papers must be approved for public release via the appropriate procedure of their employers/funding agencies prior to submittal.

**Special Session Proposals:** Proposers are invited to submit via the conference web page the theme of the special session as well as a list of possible committed papers. Proposals for special sessions are due by 1 February 2013. Papers for special sessions must also be submitted for review by 1 March 2013.

**Tutorial Proposals:** The first day of the conference will be devoted to tutorials on information fusion. Proposals for tutorials are invited. A title and description of the tutorial and biographical sketch of the instructor are due via the conference web page by 1 February 2013.

**Student Paper Program:** Fusion 2013 is featuring a student paper program to encourage the involvement of young engineers and scientists in information fusion. Conference fees will be discounted for all student attendees. Further details will be available at the conference website.

### Important Deadlines

Special session proposals	1 February 2013
Tutorial proposals	1 February 2013
Full paper submission	1 March 2013
Notification of acceptance	15 April 2013
Final paper submission	15 May 2013
Early registration	15 May 2013

Contact Information: [efe@eng.ankara.edu.tr](mailto:efe@eng.ankara.edu.tr)  
[r.streit@ieee.org](mailto:r.streit@ieee.org)