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Daniel de Leng, and Fredrik Heintz · Towards On-Demand Semantic Event Processing for Stream Reasoning

Joachim Biermann, Jesus Garcia, Ksawery Krenc, Vincent Nimier, Kellyn Rein, and Lauro Snidaro · Multi-level Fusion of Hard and Soft Information

Valentina Dragos, and Kellyn Rein · Integration of soft data for information fusion: pitfalls, challenges and trends

David Griol, José Manuel Molina, and Jesús García-Herrero · Processing and fusioning multiple heterogeneous information sources in multimodal dialog systems

Cheol Young Park, Kathryn Blackmond Laskey, Paulo C. G. Costa, and Shou Matsumoto · Predictive Situation Awareness Reference Model using Multi-Entity Bayesian Networks

Special Session 06-CIF - Context-based Information Fusion

- M. Podt, M. Bootsvelda, Y. Boers, and F. Papi · Exploiting Imprecise Constraints in Particle Filtering Based Target Tracking
- Fernando Terroso-Saenz, Mercedes Valdes-Vela, and Antonio F. Skarmeta-Gomez · Design of an Event-based Architecture for the Intra-vehicular Context Perception
- Giuliana Pallotta, Steven Horn, Paolo Braca, and Karna Bryan · Context-Enhanced Vessel Prediction Based On Ornstein-Uhlenbeck Processes Using Historical AIS Traffic Patterns: Real-World Experimental Results
- Claude Aynaud, Coralie Bernay-Angeletti, Roland Chapuis, Romuald Aufrère, Christophe Debain, and Nadir Karam · Real-Time vehicle localization using a top-down process
- Alya Itani, Jean-Marc Le Caillec, Bassel Solaiman, and Ali Hamié · Hybrid Probability-Possibility Decision Support Systems for Merging Technical Indices
- Zhenlu Jin, Xuezhi Wang, Mark Morelande, William Moran, Quan Pan, and Chunhui Zhao · Landmark Selection for Scene Matching with Knowledge of Color Histogram
- Enrique Martí, Borja González, Alvaro Luis, Jesús García, José M. Molina, and Irene López García · Geographic context configuration in fusion algorithms for maritime surveillance
- David Griol, Jesús García-Herrero, and José Manuel Molina · A novel approach for data fusion and dialog management in user-adapted multimodal dialog systems
- Alberto Pérez, Pablo Chamoso, Víctor Parra, and Antonio Juan Sánchez · Ground Vehicle Detection Through Aerial Images Taken by a UAV
- Enrique Martí, Jesús García, and José M. Molina · Navigation capabilities of mid-cost GNSS/INS vs. smartphone Analysis and Comparison in Urban Navigation scenarios
- Zhenlu Jin, Xuezhi Wang, William Moran, Quan Pan, and Chunhui Zhao · Efficient Scene Matching Using Salient Regions Under Spatial Constraints
- Alan N. Steinberg, Christopher L. Bowman, Gary Haith, and Erik Blasch · Adaptive Context Assessment and Context Management
- Nayat Sanchez-Pi, Luis Martí, José Manuel Molina, and Ana Cristina Bicharra Garcia · An Information Fusion Framework for Context-based Accidents Prevention

Special Session 07-DMKDIF - Data Mining and Knowledge Discovery in Information Fusion

- Eduardo Correa Gonçalves · A Human-Centered Approach for Mining Hybrid-Dimensional Association Rules
- Miguel Ángel Abad,João Bártolo Gomes, and Ernestina Menasalvas · Recurring Concept Detection for Spam Filtering
- Mikel Galar, Edurne Barrenechea, Alberto Fernández, and Francisco Herrera · Enhancing Difficult Classes in One-vs-One Classifier Fusion Strategy using Restricted Equivalence Functions
- Zhun-ga Liu, Quan Pan, Jean Dezert, Gregoire Mercier, and Yong Liu · Fuzzy-belief K-nearest neighbor classifier for uncertain data
- Fabio Mazzarella, Michele Vespe, Dimitrios Damalas, and Giacomo Osio · Discovering Vessel Activities at Sea using AIS Data: Mapping of Fishing Footprints
- Ashley McAbee, James Scrofani, Murali Tummala, David Garren, and John McEachen · Traffic Pattern Detection Using the Hough Transformation for Anomaly Detection to Improve Maritime Domain Awareness
- Rafael Falcon and Rami Abielmona, and Erik Blasch · Behavioral Learning of Vessel Types with Fuzzy-Rough Decision Trees
- Vicenç Torra, Yasuo Narukawa, Toho Gakuen, and Daniel Abril · Comparing fuzzy measures through their M¨obius transform
- Sandra Escudero, Angel L. Garrido, and Sergio Ilarri · Obtaining Knowledge from the Web using Fusion and Summarization Techniques
- María N. Moreno García, Félix Martín González, and Javier González Robledo · Mining patient data from heterogeneous sources for decision making on administration of non invasive mechanical ventilation in intensive care units
- M. Dolores Ruiz, Juan G´omez-Romero, and Maria J. Martin-Bautista · Meta-Association Rules for Fusing Regular Association Rules from Different Databases
- Victor Aranda, Julio Calero, Francisco Comino, Arturo Montejo, and Jose-Maria Serrano · Knowledge fusion in the Agro-environmental Field: A Global Index for Soil Quality in Olive groves from Quantitative and Qualitative Variables

*Special Session 08-IIF - Intelligent Information Fusio*n

- Xin-de Li, Jin-dong Pan, and Jean Dezert · Automatic Aircraft Recognition using DSmT and HMM
- Xiao-Hong Yu, Qing-Jun Zhou, Yan-Li Li, Jin An, and Zhi-Cheng Liu · A New Self-Adaptive Fusion Algorithm Based on DST and DSmT
- Ralf Bruns, Jurgen Dunkel, Holger Billhardt, Marin Lujak, and Sascha Ossowski · Using Complex Event Processing to Support Data Fusion for Ambulance Coordination
- Claudio Farias, Luci Pirmez, Flávia Delicato, Luiz Carmo, Wei Li, Albert Y. Zomaya, and José N. de Souza · Multisensor Data Fusion in Shared Sensor and Actuator Networks
- Zhao Chunhui, Wang Rongzhi, Zhang Tianwu, and Pan Quan · Visual Odometry and Scene Matching Integrated Navigation System in UAV
- Zhun-ga Liua, Quan Pan, Gregoire Mercier, and Jean Dezert · Pattern classification with missing data using belief functions
- Sigeru Omatu, Daigo Hayashi, and Mitsuaki Yano · Odor Classification of Wines by UsingNeural Net orks
- Sara Rodríguez, Carolina Zato, Tiancheng Li, and Juan Manuel Corchado · Fusion System based on Multi-agent Systems to merge data from WSN
- Liang Yu,Yong-mei Cheng, Lin Song, Zhun-ga Liu, and Ke-zhe Chen · Underwater Acoustic Multi-target Recognition Algorithm Based on Hierarchical Information Fusion Structure
- Antonio Juan Sánchez Martín, Fernando De La Prieta Pintado, and Giovanni De Gasperis · Fixing and evaluating texts: Mixed text reconstruction method for data fusion environments
- Emilia López-Iñesta, Miguel Arevalillo-Herráez, and Francisco Grimaldo · Classification-based multimodality fusion approach for similarity ranking
- Gabriel Villarrubia, Juan Francisco De Paz Santana, Fernando De la Prieta, and Javier Bajo · Hybrid Indoor Location System for Museum Tourist Routes in Augmented Reality
- Gabriel Villarrubia, Juan Francisco De Paz Santana, Javier Bajo, and Juan M. Corchado · Open multi-agent architecture for information fusion
- Pablo Chamoso, Alberto Pérez, Sara Rodríguez, Juan M. Corchado, Mireia Sempere, Ramón Rizo, Fidel Aznar, and Mar Pujol · Modeling Oil-Spill Detection with Multirotor Systems Based on Multi-Agent Systems
- Alvaro Luis Bustamante, Jose M. Molina, and Miguel A. Patricio · Information fusion as input source for improving multi-agent system autonomous decision-making in maritime surveillance scenarios

- Yue Ai, Wei Yi, Mark R. Morelande, and Lingjiang Kong · Joint multi-target detection and localization with a noncoherent statistical MIMO radar
- Jemin George, Socrates Deligeorges, and George Cakiades · Multi-Shooter Localization using Finite Point Process
- Abu Sajana Rahmathullah, Lennart Svensson, and Daniel Svensson · Two-filter Gaussian mixture smoothing with posterior pruning
- Khalid Yousif, Alireza Bab-Hadiashar, and Reza Hoseinnezhad · A Real-Time RGB-D Registration and Mapping Approach by Heuristically Switching Between Photometric and Geometric Information
- Stephan Reuter, Ba-Tuong Vo, Ba-Ngu Vo, and Klaus Dietmayer · Multi-Object Tracking Using Labeled Multi-Bernoulli Random Finite Sets
- Xionghu Zhong, Wenwu Wang, Mohsen Naqvi, and Eng Siong Chng · A Bayesian Performance Bound for Time-Delay of Arrival based Acoustic Source Tracking in a Reverberant Environment
- Ming Lei, Zhongliang Jing, and Peng Dong · Extended GM-PHD Filter For Multitarget Tracking in Nonlinear/Non-Gaussian System
- Benjamin Pannetier, Jean Dezert, and Geneviève Sella · Multiple target tracking with wireless sensor network for ground battlefield surveillance
- Volkan Kılıç, Xionghu Zhong, Mark Barnard, Wenwu Wang, and Josef Kittler · Audio-Visual Tracking of a Variable Number of Speakers with a Random Finite Set Approach
- Ata-ur-Rehman, Syed Mohsen Naqvi, Lyudmila Mihaylova, and Jonathon A. Chambers · Multi-target Tracking by Using Particle Filtering and a Social Force Model
- Weifeng Liu, and Chenglin Wen · The Fast Linear Multisensor RFS-multitarget Tracking Filters
- Lan Jiang, Sumeetpal S. Singh, and Sinan Yıldırım · A New Particle Filtering algorithm for Multiple Target Tracking with Non-linear Observations

Special Session 12-ASPF - Advanced Sigma-Point Filters: Analysis, Sigma-Point Set Design, and Applications

- Jindřich Duník, Ondřej Straka, and Miroslav Šimandl · On Sigma-Point Set Rotation in Derivative-Free Filters
- Jindřich Duník, Ondřej Straka, Miroslav Šimandl, and Erik Blasch · Comparison of Adaptive and Randomized Unscented Kalman Filter Algorithms
- Juho Kokkala, Arno Solin, and Simo Särkkä · Expectation Maximization Based Parameter Estimation by Sigma-Point and Particle Smoothing
- Ángel F. García-Fernández, Lennart Svensson, and Mark R. Morelande · Iterated statistical linear regression for Bayesian updates
- Xiaoxu Wang, and Quan Pan · Nonlinear Gaussian Filter with the Colored Measurement Noise
- Simo Särkkä, Jouni Hartikainen, Lennart Svensson, and Fredrik Sandblom · Gaussian Process Quadratures in Nonlinear Sigma-Point Filtering and Smoothing
- Igor Gilitschenski, Jannik Steinbring, Uwe D. Hanebeck, and Miroslav Šimandl · Deterministic Dirac Mixture Approximation of Gaussian Mixtures
- Yang Cheng, Yang Tian, and John L. Crassidis · Extension of the Sparse Grid Quadrature Filter
- Jian Lan, and X. Rong Li · Nonlinear Estimation by Linear Estimation with Augmentation of Uncorrelated Conversion
- Uwe D. Hanebeck · Sample Set Design for Nonlinear Kalman Filters Viewed as a Moment Problem

Special Session 13-SSRM - Sensor Scheduling and Resources Management

- Teun H. de Groot, Oleg A. Krasnov, and Alexander G. Yarovoy · Mission-driven Sensor Management based on Expected-Utility and Prospect Objectives
- Teun H. de Groot, Oleg A. Krasnov, and Alexander G. Yarovoy · Mission-driven Resource Allocation based on Subjective Input with Extra Level of Uncertainty
- Joris Sijs, Leon Kester, and Benjamin Noack · A study on event triggering criteria for estimation
- Hadi Jamali-Rad, Andrea Simonetto, Geert Leus, and Xiaoli Ma · Sparsity-Aware Sensor Selection for Correlated Noise
- John D. Glass, W. D. Blair, and Yaakov Bar-Shalom · Optimizing Radar Signal to Noise Ratio for Tracking Maneuvering Targets
- Leon Kester, and Maarten Ditzel · Maximising Effectiveness of Distributed Mobile Observation Systems in Dynamic Situations
- Xiangyang Liu, and John S. Baras · Using Trust in Distributed Consensus with Adversaries in Sensor and Other Networks
- Vikram Krishnamurthy · POMDP Sensor Scheduling with Adaptive Sampling

Special Session 14-HMPBE - Homotopy Methods for Progressive Bayesian Estimation

- Kai Kang, Vasileios Maroulas, and Ioannis D. Schizas · Drift Homotopy Particle Filter for non-Gaussian descarga
- Jannik Steinbring, and Uwe D. Hanebeck · Progressive Gaussian Filtering Using Explicit Likelihoods
- Kristine L. Bell, and Lawrence D. Stone · Implementation of the Homotopy Particle Filter in the JPDA and MAP-PF Multi-Target Tracking Algorithms

Special Session 15-DE - Directional Estimation

- Bryan Stanfill · Robust Statistical Methods for the Rotation Group
- Gerhard Kurz, Igor Gilitschenski, and Uwe Hanebeck · Deterministic Approximation of Circular Densities with Symmetric Dirac Mixtures Based on Two Circular Moments
- Ivan Marković, Mario Bukal, Josip Ćesić, and Ivan Petrović · Direction-only tracking of moving objects on the unit sphere via probabilistic descarga
- Igor Gilitschenski, Gerhard Kurz, Simon J. Juliery, and Uwe D. Hanebeck · A New Probability Distribution for Simultaneous Representation of Uncertain Position and Orientation
- Jean-Christophe Kucwaj, Georges Stienne, Serge Reboul, Jean-Bernard Choquel, and Mohammed Benjelloun · Circular multiple change-points estimation applied to the GPS-L2C phase signal

Special Session 16-DFMILPO - Data Fusion Methods for Indoor Localization of People and Objects

- Philipp Müller, Matti Raitoharju, and Robert Piché · A Field Test of Parametric WLAN-Fingerprint-Positioning Methods
- Xiaoxue Feng, Hichem Snoussi, and Yan Liang · Constrained Extended Kalman Filter for Ultra-Wideband Radio based Individual Navigation
- Benjamin H. Groh, Martin Friedl , Andre G. Linarth, and Elli Angelopoulou · Advanced Real-time Indoor Parking Localization based on Semi-Static Objects
- Thomas Willemsen, Friedrich Keller, and Harald Sternberg · Concept for building a smartphone based indoor localization system
- Ricardo Anacleto, Lino Figueiredo, Ana Almeida, and Paulo Novais · Localization system for pedestrians based on sensor and information fusion

Special Session 17-PRGBDDF - Probabilistic RGBD Data Fusion

- Gerhard Kurz, and Uwe D. Hanebeck · 2D and 3D Image Stabilization for Robotic Beating Heart Surgery
- Timm Linder, and Kai O. Arras · Multi-Model Hypothesis Tracking of Groups of People in RGB-D Data
- Florian Faion, Antonio Zea, and Uwe D. Hanebeck · Reducing Bias in Bayesian Shape Estimation

Special Session 18-ADKF - Advances in Distributed Kalman Filtering

- Jiří Ajgl, Miroslav Šimandl, Marc Reinhardt, Benjamin Noack, and Uwe D. Hanebeck · Covariance Intersection in State Estimation of Dynamical Systems
- Jiří Ajgl and Miroslav Šimandl · Linear Fusion of Estimators with Gaussian Mixture Errors under Unknown Dependences
- Felix Govaers, and Marianne Wilms · Distributed Bearings–Only Tracking Using the Federated Kalman Filter
- Wolfgang Koch, and Felix Govaers · On Decorrelated Track-to-Track Fusion based on Accumulated State Densities
- Chee-Yee Chong, Shozo Mori, Felix Govaers, and Wolfgang Koch · Comparison of Tracklet Fusion and Distributed Kalman Filter for Track Fusion
- Marc Reinhardt, Benjamin Noack, Sanjeev Kulkarni, and Uwe D. Hanebeck · Distributed Kalman Filtering in the Presence of Packet Delays and Losses
- Zhansheng Duan, X. Rong Li, and U. D. Hanebeck · Multi-sensor Distributed Estimation Fusion Using Minimum Distance Sum
- Benjamin Noack, Marc Reinhardt, and Uwe D. Hanebeck · On Nonlinear Track-to-track Fusion with Gaussian Mixtures

Special Session 19-EOGT - Extended Object and Group Tracking

- B. Errasti-Alcala, and P. Braca · Track Before Detect Algorithm for Tracking Extended Targets applied to Real-World Data of X-band Marine Radar
- Karl Granström, Antonio Natale, Paolo Braca, Giovanni Ludeno, and Francesco Serafino · PHD Extended Target Tracking Using an Incoherent X-band Radar: Preliminary Real-World Experimental Results
- Karl Granström, Stephan Reuter, Daniel Meissner, and Alexander Scheel · A multiple model PHD approach to tracking of cars under an assumed rectangular shape
- Pietro Morerio, Lucio Marcenaro, and Carlo S. Regazzoni · A Generative Superpixel Method
- Alexander Scheel, Karl Granströmy, Daniel Meissner, Stephan Reuter, and Klaus Dietmayer · Tracking and Data Segmentation Using a GGIW Filter with Mixture Clustering
- Huanlong Zhang, Shiqiang Hu, Lingkun Luo, and Xiaolu Ke · Object Tracking using 2DLPP Manifold Learning
- Jian Lan, and X. Rong Li · Joint Tracking and Classification of Non-Ellipsoidal Extended Object Using Random Matrix
- Lifan Sun, Jian Lan, and X. Rong Li · Joint Tracking and Classification of Extended Object Based on Support Functions
- Guanghua Zhang, Feng Lian, and Chongzhao Han · CBMeMBer filters for nonstandard targets, I: Extended targets
- Guanghua Zhang, Feng Lian, and Chongzhao Han · CBMeMBer filters for nonstandard targets, II: Unresolved targets
- Markus Schütz, Nils Appenrodt, Jürgen Dickmann, and Klaus Dietmayer · Multiple extended objects tracking with object-local occupancy grid maps
- Lifan Sun, Jian Lan, and X. Rong Li · Modeling for Tracking of Complex Extended Object Using Minkowski Addition
- Daniel Sigalov, Tomer Michaeli, and Yaakov Oshman · Simultaneous Tracking and Data Association in an Extended Maneuvering Target Using the IMM Methodology
- Antonio Zea, Florian Faion, and Uwe D. Hanebeck · Tracking Connected Objects Using Interacting Shape Models

Special Session 20-TFI - Trust in Fused Information

- Lance Kaplan, Murat Şensoy, and Geeth de Mel · Trust Estimation and Fusion of Uncertain Information by Exploiting Consistency
- Ulaş Yüksel, Hasan Sözer, and Murat Şenso · Trust-based Fusion of Classifiers for Static Code Analysis
- Robert Canavan, Chidambar Ganesh, and Bill Matuszak · Evolution of Fusion in Navy Tactical Systems
- Zuxing Li, and Tobias J. Oechtering · Differential Privacy in Parallel Distributed Bayesian Detections
- S. Sikdar, S. Adalı, M. Amin, T. Abdelzaher, K. Chan, J.-H. Cho, B. Kang, and J. O'Donovan · Finding True and Credible Information on Twitter