

Day	Block #	Track #	ID	Session Title	EAST Q&A Session Chair	WEST Q&A Session Chair	Presentation titles	Speaker	Authors
Tuesday, Jul 7	A	1	SS03-1	Advances in Distributed Kalman Filtering and Fusion 1	Benjamin Noack	Felix Govaers	Communication Efficient Decentralized Track Fusion Using Selective Information Extraction	Robin Forsling	Robin Forsling
							Inverse Covariance Intersection Fusion of Multiple Estimates	Jiří Ajgl	Jiří Ajgl and Ondřej Straka
							Representing and updating objects' identities in semantic SLAM	Amit Elbaz	Or Tslil, Amit Elbaz, Tal Feiner and Avishy Carmi
							Fully Decentralized Estimation Using Square-Root Decompositions	Susanne Radtke	Susanne Radtke, Benjamin Noack and Uwe D. Hanebeck
		2	SS02	Data Fusion for Industry 4.0	Claudio De Farias	Jose Brancalion	Soft Sensor for Predicting Particle Fineness in a Cement Mill	Rowan Lange	Rowan Lange, Tony Lange and Terence Van Zyl
							An IoT Inspired Distributed Data Fusion Architecture for Coastal Surveillance Applications	Jose Brancalion	Jose Brancalion and Stiven S. Dias
							Data-Driven Evolutionary Optimisation for the design parameters of a Chemical Process: A Case Study	Liezl Stander	Matthew Woolway, Terence Van Zyl and Liezl Stander
							Development of the UFRJ Nautilus' AUV: A Multisensor Data Fusion case study	Claudio de Faria	Samuel Simplicio, Henrique Júnior, Gustavo Villela, Felipe Costa, Vitor Pavani, Luma Rodrigues and Claudio de Faria
		Real-Time Manufacturing Drilling Operations Analysis by Utilization of Data-Fusion	Marzieh Zare	Marzieh Zare, Ari Visa, Ville Pärssinen, Hesam Jafarian, Henri Oksman and Liisa Aha					
		3	SS07	Context-based Information Fusion	Lauro Snidaro	Lauro Snidaro	Geometric Fusion via Joint Delay Embeddings	Elchanan Solomon	Yitzchak Solomon and Paul Bendich
							Extended Existence Probability Using Digital Maps for Object Verification	Fabian Gies	Fabian Gies, Joachim Posselt, Michael Buchholz and Klaus Dietmayer
							Multi-modal Video Fusion for Context-aided Tracking	Erik Blasch	Erik Blasch, Yufeng Zheng, Shuo Lin and Zheng Liu
							Context-Based Vessel Trajectory Forecasting: A Probabilistic Approach Combining Dynamic Bayesian Networks with an Auxiliary Position Determination Process	Lennard Jansen	Lennard Jansen, Gregor Pavlin, Alexander Atamas and Franck Mignet
		4	P21	Fusion for Image Data	Avishy Carmi	Benoit Debaque	Sensor Management in 2D Lidar-Based Underground Positioning	Kristin Nielsen	Kristin Nielsen and Gustaf Hendebý
							UCSR: Registration and Fusion of Cross-Source 2D and 3D Sensor Data in Unstructured Environments	Nina Felicitas Heide	Nina Felicitas Heide, Philipp Woock, Maximilian Sauer, Timo Leitritz and Michael Heizmann
							Camera Localization based on Belief Clustering	Sylvie Le Hégarat-Mascle	Huiqin Chen, Sylvie Le Hégarat-Mascle and Emanuel Aldea
							Fusing LiDAR and Color Imagery for Object Detection using Convolutional Neural Networks	Fahimeh Farahnakian	Fahimeh Farahnakian and Jukka Heikkonen
		5	P22	Uncertain Reasoning	Jean Dezert	Lance Kaplan	Performance-Agnostic Fusion of Probabilistic Classifier Outputs	Jordan Masakuna	Jordan Masakuna
							Reasoning With Interval-Valued Probabilities	Kamal Premaratne	Janith Heendeni, Kamal Premaratne and Manohar Murthi
							The SPOTIS Rank Reversal Free Method for Multi-Criteria Decision-Making Support	Jean Dezert	Jean Dezert, Albena Tchamova, Deqiang Han and Jean-Marc Tacnet

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Tuesday, Jul 7	B	1	SS03-2	Advances in Distributed Kalman Filtering and Fusion 2	Felix Govaers	Susanne Radtke	Improved Cubature Kalman Filter for Target Tracking in Underwater Sensor Networks	Yanping Chen	Junhai Luo, Yanping Chen, Zhiyan Wang, Man Wu and Yang Yang
							Track-Before-Detect for Bistatic Radar Based on Velocity Filtering	Tao Han	Tao Han, Liangliang Wang and Gongjian Zhou
							Hierarchical Active Fault Diagnosis for Stochastic Large Scale Systems with Coupled Faults	Ondrej Straka	Ondrej Straka and Ivo Puncochar
							Relative Localization in Multi-Robot Systems Based on Dead Reckoning and UWB Ranging	Ming Li	Ming Li, Zhuang Chang and Tin Lun
		2	P01	Information Fusion for Energy Applications	Bharanidhar Duraisamy	Nageswara Rao	A Novel Method for DGA Forecasting in Power Transformers Using Least-Squares Support Vector Regression	Terence Van Zyl	Terence Van Zyl and John Atherfold
							Reactor Power Level Estimation by Fusing Multi-Modal Sensor Measurements	Nageswara Rao	Nageswara (Nagi) S. Rao , Christopher Greulich, Satyabrata Sen, Kenneth J. Dayman, Jason Hite, Will Ray, Richard Hale, Andrew D. Nicholson, Jared Johnson, Riley D. Hunley, Monica Maceira, Chengping Chai, Omar Marcillo , Tom Karnowski, and Randall Wetherington
							A Coordinated Charging Model for Electric Vehicles in a Smart Grid using Whale Optimization Algorithm	Kayode Adetunji	Kayode Adetunji, Ivan Hofsjajer and Ling Cheng
		3	P07	Registration	Ng Gee Wah	Chee-Yee Chong	Information-Based Georeferencing by Dual State Iterated Extended Kalman Filter with Implicit Measurement Equations and Nonlinear Geometrical Constraints	Rozhin Moftizadeh	Rozhin Moftizadeh, Johannes Bureick, Sören Vogel, Ingo Neumann and Hamza Alkhatib
							An Improved Algorithm for Universal Sensor Registration	Daniel Sigalov	Daniel Sigalov, Aharon Gal and Boaz Vigdor
							Modular, Risk-aware Mapping and Fusion of Environmental Hazards	Lennart Puck	Lennart Puck, Tristan Schnell, Carsten Plasberg, Timothée Büttner, Georg Heppner, Arne Rönnau and Rüdiger Dillmann
		4	SS08-1	Machine Learning Methods 1 - Image Classification and Segmentation	Lyudmila Mihaylova	Pau Closas	Two-Step Surface Damage Detection Scheme using Convolutional Neural Network and Artificial Neural Neural	Alice Yang	Alice Yi Yang and Ling Cheng
							A Weighted Variance Approach for Uncertainty Quantification in High Quality Steel Manufacturing	Yueda Lin	Peng Wang, Yueda Lin, Ree Muroiwa, Simon Pike and Lyudmila Mihaylova
							Machine Learning Approaches for Cancer Bone Segmentation from Micro Computed Tomography Images	Yifei Zhu	Yifei Zhu, Alanna Green, Lingzhong Guo, Holly Evans and Lyudmila Mihaylova
							A Review on Vision-Based Vehicle Identification in Intelligent Traffic Systems using Convolutional Neural Network	Mpho Moaga	Mpho Moaga, Chunling Tu and Pius Adewale Owolawi
							A rules-based and Transfer Learning approach for deriving the Hubble type of a galaxy from the Galaxy Zoo data	Mohamed Variawa	Mohamed Variawa, Matthew Woolway and Terence van Zyl
		5	P11	Fusion for Social Systems	Valentina Dragos	Claire Laudy	On Ethically Aligned Information Fusion for Defence and Security Systems	Wolfgang Koch	Wolfgang Koch
							Modelling Of The Complex Societal Problem Of Establishing A National Energy Sufficiency Competence	Louise Leenen	Jan Hendrik Roodt, Louise Leenen, Joey Jansen van Vuuren and Zubeida C. Khan
							Deep Similarity Learning for Soccer Team Ranking	Habeebullah Manack	Habeebullah Manack and Terence Van Zyl
							Detection of Anomalous Behavioural Patterns In University Environment Using CNN-LSTM	Dorcas Oladayo Esan	Dorcas Oladayo Esan, Pius Adewale Owolawi and Chuling Tu

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Tuesday, Jul 7	C	1	P18	Assignment Tracking	Ondrej Straka	David Crouse	A Complete Optimal Subpattern Assignment (COSPA) Metric	Tuyet Vu	Tuyet Vu
							Simultaneous Estimation of Filtered and Smoothed State Probability Density Functions by Multiple Distribution Estimation	Masaya Murata	Masaya Murata, Isao Kawano and Koichi Inoue
							A Dual-Ascent Algorithm for the Multi-dimensional Assignment Problem: Application to Multi-Target Tracking	Rakesh Nagi	Samhita Vadrevu and Rakesh Nagi
							Backward Simulation for Sets of Trajectories	Yuxuan Xia	Yuxuan Xia, Lennart Svensson, Ángel García-Fernández, Karl Granström and Jason L. Williams
		2	P02	Information Fusion for Automotive Applications	Simon Godsill	Ratnasingham Tharmarasa	Learning Driver Behaviors Using A Gaussian Process Augmented State-Space Model	Anton Kullberg	Anton Kullberg, Isaac Skog and Gustaf Hendeby
							Automated Vehicle Detection in a Nuclear Facility Using Low-Frequency Acoustic Sensors	Jason Hite	Jason Hite, Kenneth Dayman, Nageswara Rao, Christopher Greulich, Satyabrata Sen, David Chichester, Andrew Nicholson, Dan Archer, Michael Willis, Irakli Garishvili
							Detection and Tracking on Automotive Radar Data with Deep Learning	Julius Tilly	Julius Tilly, Stefan Haag, Ole Schumann, Fabio Weishaupt, Bharanidhar Duraisamy, Jürgen Dickmann and Martin Fritzsche
							How much resolution is necessary in automotive radar classification?	Nicolas Scheiner	Nicolas Scheiner, Ole Schumann, Florian Kraus, Nils Appenrodt, Jürgen Dickmann, and Bernhard Sick
		3	P19	Sensor Management	Martin Ulmke	Tilo Schwarz	Sensor Path Planning Using Reinforcement Learning	Folker Hoffmann	Folker Hoffmann, Alexander Charlish, Matthew Ritchie and Hugh Griffiths
							Passive sensor planning for TDOA/FDOA geolocation under communication constraints	Hugo Seute	Hugo Seute, Laurent Ratton and Antoine Fagette
							Multi-Task Sensor Resource Balancing Using Lagrangian Relaxation and Policy Rollout	Max Ian Schöpe	Max Ian Schöpe, Hans Driessen and Alexander Yarovoy
							Optimal scheduling policy for spatio-temporally dependent observations using Age-of-Information	Victor Wattin Håkansson	Victor Wattin Håkansson, Naveen K. D. Venkategowda and Stefan Werner
		4	SS08-2	Machine Learning Methods 2 - Environmental Sensing	Simukai Utete	Simukai Utete	On the Impact of Different Kernels and Training Data on a Gaussian Process Approach for Tracking	Lyudmila Mihaylova	Waqas Aftab and Lyudmila Mihaylova
							Data Fusion and Artificial Neural Networks for Modelling Crop Disease Severity	Priyamvada Shankar	Priyamvada Shankar, Andreas Johnen and Marcus Liwicki
							Challenges in automated HUMINT processing for situational assessment: Experiences from NATO CIMIC Joint Cooperation	Kellyn Rein	Kellyn Rein, Lauro Snidaro, Joachim Biermann, Ksawery Krenc, Vincent Nimier and Jesus Garcia
		5	SS10	Explainable AI for Information Fusion	Lauro Snidaro	Lauro Snidaro	An Explainable Statistical Learning Algorithm to Support Data Fusion	Kenneth Dayman	Kenneth Dayman, Jason Hite, Adam Drescher and Brian Ade
							VADR: Discriminative Multimodal Explanations for Situational Understanding	Harrison Taylor	Harrison Taylor, Liam Hiley, Jack Furby, Alun Preece and Dave Braines
							Uncertainty measurements in neural network predictions for classification tasks	Alta de Waal	Alta de Waal and Carl Steyn
							Explainability in threat assessment with evidential networks and sensitivity spaces	Pawel Kowalski	Pawel Kowalski, Maximilian Zocholl and Anne-Laure Joussemme
							Comparison of early and late fusion techniques for movie trailer genre labelling	Joseph Mervitz	Joseph Mervitz, Pieter de Villiers, Pieter Jacobs and Mauritz Kloppers

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Wednesday, Jul 8	A	1	P16	Multi-Bernoulli Filter	Zhansheng Duan	Chee-Yee Chong	A Detection Driven Adaptive Birth Density for the Labeled Multi-Bernoulli Filter	Patrick Hoher	Patrick Hoher, Tim Baur, Stefan Wirtensohn and Johannes Reuter
							Trajectory multi-Bernoulli filters for multi-target tracking based on sets of trajectories	Angel Garcia-Fernandez	Angel Garcia-Fernandez, Lennart Svensson, Jason Williams, Yuxuan Xia and Karl Granstrom
							Bernoulli merging for the Poisson multi-Bernoulli mixture filter	Marco Fontana	Marco Fontana, Ángel F. García-Fernández and Simon Maskell
							Robust delta-Generalized Labeled Multi-Bernoulli Filter for Nonlinear Systems with Heavy-tailed Noises	Liming Hou	Liming Hou, Feng Lian and Giuseppe Thadeu Freitas De Abreu
		2	S01-1	Evaluation of Techniques for Uncertainty Reasoning 1	Anne-Laure Joussemle	Paulo Costa	Fast Fusion of Basic Belief Assignments Defined on a Dichotomous Frame of Discernment	Florentin Smarandache	Jean Dezert, Florentin Smarandache, Albena Tchamova and Deqiang Han
							Use cases for social data analysis with URREF criteria	Valentina Dragos	Claire Laudy and Valentina Dragos
							Trend analysis in online data with unsupervised classification and appraisal categories	Valentina Dragos	Valentina Dragos, Jérôme Besombes and Aurélien Mascaro
							Mixing social media analysis and physical models to monitor invasive species	Claire Laudy	Claire Laudy, Lőrinc Mészáros, Sonja Wanke and Mercedes de Juan
		3	SS05-1	Advanced Nonlinear Filtering 1 - Nonlinear Filtering	Ondrej Straka	Zheng Liu	Worldwide Ground Target State Propagation	David Crouse	David Crouse
							Nonlinear Filtering with Polynomial Series of Gaussian Random Variables	Renato Zanetti	Simone Servadio, Renato Zanetti and Brandon Jones
							Progressive Bayesian Update Using Interleaved Gaussian Mixture and Dirac Mixture	Daniel Frisch	Daniel Frisch and Uwe Hanebeck
							A New Leader-follower Model for Bayesian Tracking	Qing Li	Qing Li and Simon Godsill
		4	P04	Navigation	Molahlegi Moloape	Molahlegi Moloape	Dual-frequency Collaborative Positioning for Minimization of GNSS Errors in Urban Canyons	Simon Ollander	Simon Ollander, Florian Alexander Schiegg, Friedrich-Wilhelm Bode and Marcus Baum
							GNSS-Free Maritime Navigation using Radar and Digital Elevation Models	Jonatan Olofsson	Jonatan Olofsson, Gustaf Hendeby, Fredrik Gustafsson, Deran Maas and Stefano Marano
							Graph Optimization Methods for Large-Scale Crowdsourced Mapping	Alexis Stoven-Dubois	Alexis Stoven-Dubois, Aziz Dziri, Bertrand Leroy and Roland Chapuis
							Belief Space Planning using Landmark Density Information	Jonas Nordlöf	Jonas Nordlöf, Gustaf Hendeby and Daniel Axehill
		5	S04	Information Fusion in Multi-Biometrics and Forensics	Naser Damer	Raghavendra Ramachandra	Unique Faces Recognition in Videos	Jiahao Huo	Jiahao Huo and Terence van Zyl
							Single Image Based Face Morphing Attack Detection Using Ensemble of Features	Sushma Venkatesh	Sushma Venkatesh, R. Raghavendra, Kiran Raja and Christoph Busch
							Fusing Iris and Periocular Region for User Verification in Head Mounted Displays	Fadi Boutros	Fadi Boutros, Naser Damer, Kiran Raja, Raghavendra Ramachandra, Florian Kirchbuchner and Arjan Kuijper
							Deep Learning Multi-layer Fusion for an Accurate Iris Presentation Attack Detection	Meiling Fang	Meiling Fang, Naser Damer, Fadi Boutros, Florian Kirchbuchner and Arjan Kuijper

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Wednesday, Jul 8	B	1	P14	Multiple Hypothesis Tracking	Murat Efe	Roy Streit	Analysis of MHT and GBT Approaches to Disparate-Sensor Fusion	Stefano Coraluppi	Craig Carthel, Jordan LeNoach, Stefano Coraluppi, Alan Willsky and Brandon Bale
							Continuous-discrete trajectory PHD and CPHD filters	Angel Garcia-Fernandez	Angel Garcia-Fernandez and Simon Maskell
							Inverse Sequential Hypothesis Testing	Kunal Pattanayak	Kunal Pattanayak, Vikram Krishnamurthy and Erik Blasch
							A Parallel Implementation of Hypothesis-Oriented Multiple Hypothesis Tracking	Lin Wu	Lin Wu, Fei Wang, Yongjun Xu, Yu Jiang and Jiakai Wang
		2	SS01-2	Evaluation of Techniques for Uncertainty Reasoning 2	Valentina Dragos	Kathryn Laskey	Second-Order Learning and Inference using Incomplete Data for Uncertain Bayesian Networks: A Two Node Example	Lance Kaplan	Lance Kaplan, Federico Cerutti, Murat Sensoy and Kumar Vijay Mishra
							Target Tracking Analysis for Stone Soup	Erik Blasch	Erik Blasch, Ruixin Niu and Sean O'rourke
							Towards a formal comparison of uncertainty handling	Cristina Ramos Flores	Cristina Ramos Flores, Anne-Laure Joussetme and Paulo C. G. Costa
		3	SS05-2	Advanced Nonlinear Filtering 2 - Filter Design	V́ctor Elvira	Jordi Vilà-Valls	Computationally Efficient Methods for Estimating Unknown Input Forces of Structural Systems	Hoa Van Nguyen	Hoa Van Nguyen, Damith C. Ranasinghe, Alex Skvortsov and Sanjeev Arulampalam
							Reliable Convolution in Point-Mass Filter for a Class of Nonlinear Models	Jindrich Dunik	Jindrich Dunik, Ondrej Straka and Jakub Matousek
							Resampling-free Stochastic Integration Filter	Ondrej Straka	Ondrej Straka and Jindrich Dunik
							Utility and Privacy in Object Tracking from Video Stream using Kalman Filter	Niladri Das	Niladri Das and Raktim Bhattacharya
		4	SS08-3	Machine Learning Methods 3 - Forecasting	Lyudmila Mihaylova	Alta de Waal	Regional Rainfall Prediction Using Support Vector Machine Classification of Large-Scale Precipitation Maps	Eslam Hussein	Eslam Hussein, Mehrdad Ghaziasgar and Christopher Thron
							On Error Correction Neural Networks for Economic Forecasting	Mhlasakululeka Mvubu	Mhlasakululeka Mvubu, Emmanuel Kabuga, Christian Plitz, Bubacarr Bah, Ronnie Becker and Hans Georg Zimmermann
							ND-SMPF: A Noisy Deep Neural Network Fusion Framework for Stock Price Movement Prediction	Farnoush Ronaghi	Farnoush Ronaghi, Mohammad Salimibeni, Farnoush Naderkhani and Arash Mohammadi
		5	P03	Vehicle Localization	Alexander Charlish	Zhansheng Duan	Fault Tolerant multi-sensor Data Fusion for vehicle localisation using Maximum Correntropy Unscented Information Filter and α -Rényi Divergence	Khoder Makkawi	Khoder Makkawi, Nourdine Ait-Tmazirte, Maan El Badaoui El Najjar and Nazih Moubayed
							Towards Cognitive Vehicles: GNSS-free Localization using Visual Anchors	Benoit Debaque	Abdessattar Hayouni, Nicolas Duclos-Hindie, Benoit Debaque and Mihai Cristian Florea
Feature-Based Laser Odometry for Autonomous Surface Vehicles utilizing the Point Cloud Library	Even Skjellaug						Even Skjellaug		
Polarimetric Covariance Gridmaps for Automotive Self-Localization	Fabio Weishaupt						Fabio Weishaupt, Julius Tilly, Jürgen Dickmann and Dirk Heberling		

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Wednesday, Jul 8	C	1	P17	Multi Model Tracking	Simon Godsill	Bharanidhar Duraisamy	Adaptive IMM-CFusion for a Remote IMM Track and Local Measurements	Yaakov Bar-Shalom	Rong Yang and Yaakov Bar-Shalom
							A Multiple Model Approach for Estimating Roll Rate of a Very Fast Spinning Artillery Rocket	Burak Aykenar	Mehmet Burak Aykenar, Ihsan Caner Boz, Gokhan Soysal and Murat Efe
							State Estimation from Range-Only Measurements	Zhengkun Guo	Zhengkun Guo and Gongjian Zhou
							A Cramer-Rao Lower Bound for the Estimation of Bias with a Single Bearing-Only Sensor	Sean Martin	Sean Martin, Matt Abernathy and Nima Moshtagh
		2	P23	Neural Networks	Alta DeWaal	Elisa Shahbazian	Multimodal Fusion with Co-attention Mechanism	Pei Li	Pei Li and Xinde Li
							Time-Dependent State Prediction for the Kalman Filter Based on Recurrent Neural Networks	Isabel Schlangen	Steffen Jung, Isabel Schlangen and Alexander Charlish
							Early vs Late Fusion in Multimodal Convolutional Neural Networks	Konrad Gadzicki	Konrad Gadzicki, Razieh Khamsehashari and Christoph Zetsche
							Visual comparison of statistical feature aggregation methods for video-based similarity applications	Adolfo Almeida	Adolfo Almeida, Johan De Villiers, Allan De Freitas and Mergandran Velayudan
		3	P08	Variational Inference	Uwe Hanebeck	Zhansheng Duan	Variational Bayesian Estimation of Time-Varying DOAs	Florian Meyer	Florian Meyer, Yongsung Park and Peter Gerstoft
							Outlier-Robust Schmidt-Kalman Filter using Variational Inference	Le Yang	Yi Liu, Xi Li, Yanbo Xue, Steve Weddell, Le Yang and Lyudmila Mihaylova
							Variational Compensation Based Nonlinear Filter for Continuous-Discrete Stochastic Systems	Haoran Cui	Tingjun Wang, Haoran Cui and Xiaoxu Wang
							A Variational Bayesian Approach for Estimating Colored Noise Parameters	Clark Taylor	He Bai and Clark Taylor
		4	S008-4	Machine Learning Methods 4 - Wildlife Management	Allan de Freitas	Allan de Freitas	Unique Animal Identification using Deep Transfer Learning in Siamese Networks	Terence Van Zyl	Terence van Zyl, Mathew Woolway and Bryce Engelbrecht
							Dashcam based wildlife detection and classification using fused data sets of digital photographic and simulated imagery	Bianca Ferreira	Bianca Ferreira, JP De Villiers and Allan De Freitas
							Fusion of Animal Tracks Within a Drone Formation	Juliana Thomasia C. Marcos	Juliana Thomasia C. Marcos and Simukai W. Utete
		5	P05	Indoor Localization	Fredrik Gustafsson	Pau Closas	On Parameter Mismatch for Hidden Markov Models Applied to Indoor Localization	Shuai Sun	Shuai Sun, Yan Li, Xuezhi Wang, Wayne Rowe and Bill Moran
							Learning While Tracking: A Practical System Based on Variational Gaussian Process State-Space Model and Smartphone Sensory Data	Ang Xie	Ang Xie, Feng Yin, Bo Ai, Sha Zhang and Shuguang Cui
							Bluetooth Low Energy-based Angle of Arrival Estimation via Switch Antenna Array for Indoor Localization	Zohreh Hajiakhondi-Meybodi	Zohreh Hajiakhondi-Meybodi, Mohammad Salimibeni, Konstantinos N. Plataniotis and Arash Mohammadi
							Source Localization with AOA-only and Hybrid RSS/AOA Measurements via Semidefinite Programming	Qi Wang	Qi Wang, Zhansheng Duan and X. Rong Li

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Thursday, Jul 9	A	1	SS13	Extended Object and Group Tracking	Wolfgang Koch	Peter Willett	Extended Object Tracking on the Affine Group Aff(2)	Lino Antoni Giefer	Lino Antoni Giefer, Joachim Clemens and Kerstin Schill
							Marginal Association Probabilities for Multiple Extended Objects without Enumeration of Measurement Partitions	Shishan Yang	Shishan Yang, Laura M. Wolf, and Marcus Baum
							A Comparison of Kalman Filter-based Approaches for Elliptic Extended Object Tracking	Kolja Thormann	Kolja Thormann, Shishan Yang and Marcus Baum
		2	SS05-3	Advanced Nonlinear Filtering 3 - Estimation	Jindřich Duník	Dale Blair	A nested hybrid filter for parameter estimation and state tracking in homogeneous multi-scale models	Sara Pérez-Vieites	Sara Pérez-Vieites and Joaquín Míguez
							A Sequential Lp-norm Filter for Robust Estimation	Yang Yang	Yang Yang
							α -Stable Lévy State-space Models for Manoeuvring Object Tracking	Runze Gan	Runze Gan and Simon Godsill
							A SMC Sampler for Joint Tracking and Destination Estimation from Noisy Data	Lyudmil Vladimirov	Lyudmil Vladimirov and Simon Maskell
		3	P12	Maritime Applications	Anne-Laure Jousset	Ranjeev Mittu	Risk-based Autonomous Maritime Collision Avoidance Considering Obstacle Intentions	Trym Tengesdal	Trym Tengesdal, Tor Arne Johansen and Edmund Brekke
							Deep learning approaches for AIS data association in the context of maritime domain awareness	Jun Ye Yu	Jun Ye Yu, Moslem Ouled Sghaier and Zofia Grabowiecka
							On the Effectiveness of AI-Assisted Anomaly Detection Methods in Maritime Navigation	Sandeep Kumar Singh	Sandeep Kumar Singh and Frank Heymann
							Selective Information Transmission using Convolutional Neural Networks for Cooperative Underwater Surveillance	Giovanni De Magistris	Giovanni De Magistris, Murat Uney, Pietro Stinco, Gabriele Ferri, Alessandra Tesei and Kevin Le Page
		4	P15	Random Finite Sets	Karl Granstrom	Yaakov Bar-Shalom	Spatiotemporal Constraints for Sets of Trajectories with Applications to PMBM Densities	Yuxuan Xia	Karl Granstrom, Lennart Svensson, Yuxuan Xia, Angel F. Garcia-Fernandez and Jason Williams
							The Spline Multi-Target Multi-Bernoulli Filter	Yiqi Chen	Yiqi Chen, Ping Wei, Gaiyou Li, Lin Gao and Yuansheng Li
							A Probabilistic Label Association Algorithm for Distributed Labeled Multi-Bernoulli Filtering	Thomas Kropfreiter	Thomas Kropfreiter and Franz Hlawatsch
							The Role of Bounded Fields-of-View and Negative Information in Finite Set Statistics (FISST)	Keith LeGrand	Keith LeGrand and Silvia Ferrari
		5	SS06-1	Advances in Motion Estimation 1 - Inertial Sensors	Gustaf Hendeby	Gustaf Hendeby	Sound Source Localization and Reconstruction Using a Wearable Microphone Array and Inertial Sensors	Clas Veibäck	Clas Veibäck, Martin Skoglund, Fredrik Gustafsson and Gustaf Hendeby
							Movement Tracking by Optical Flow Assisted Inertial Navigation	Lassi Meronen	Lassi Meronen, William J. Wilkinson and Arno Solin
							Adaptive compensation of measurement delays in multi-sensor fusion for inertial motion tracking using moving horizon estimation	Fabian Gurrbach	Fabian Gurrbach, Manon Kok, Raymond Zandbergen, Tijmen Hageman and Moritz Diehl
							Neural Networks Versus Conventional Filters for Inertial-Sensor-based Attitude Estimation	Daniel Weber	Daniel Weber, Clemens Gühmann and Thomas Seel

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Thursday, Jul 9	B	1	P13	Tracking Extended Objects	Le Yang	Avishy Carmi	Extended Rigid Multi-Target Tracking in Dense Point Clouds with Probabilistic Occlusion Reasoning	Seffat Chowdhury	Seffat Mohammad Chowdhury and Pieter de Villiers
							Track-Before-Detect Labeled Multi-Bernoulli Smoothing for Multiple Extended Objects	Boqian Yu	Boqian Yu and Egon Ye
							Extended Object Tracking with an Improved Measurement-to-Contour Association	Martin Michaelis	Martin Michaelis, Philipp Berthold, Thorsten Luettel, Daniel Meissner and Hans-Joachim Wuensche
							Tracking of Elliptical Extended Object with Unknown but Fixed Lengths of Axes	Li Mingkai	Mingkai Li, Jian Lan and X. Rong Li
		2	SS05-4	Advanced Nonlinear Filtering 4 - Nonlinear Tracking	Alexander Charlish	Darin Dunham	Multiple Basic Proposal Distribution Model Based Sampling Particle Filter	Lihong Shi	Lihong Shi, Feng Yang, Litao Zheng, Xiaoxu Wang and Liang Chen
							Enhancing Particle Filtering using Gaussian Processes	Tales Imbiriba	Tales Imbiriba and Pau Closas
							Position and Speed Estimation for BLDC Motors Using Fourier-Series Regression	Ajit Basarur	Ajit Basarur, Jana Mayer, Antonio Zea and Uwe D. Hanebeck
							Optimum Kernel Particle Filter for Asymmetric Laplace Noise in Multivariate Models	Ulrika Andersson	Ulrika Andersson and Simon Godsill
		3	P09	Fusion for Biomedical Applications	Gregov Pavlin	Sean O'Rourke	Autonomous Sleep Apnea Detection with a Dirichlet Process Mixture Model and Oxygen Saturation Data	Zhenglin Li	Zhenglin Li, Mahnaz Arvaneh, Heather Elphick and Ruth Kingshott, Lyudmila Mihaylova
							Review of Motion Artifacts Removing Techniques for Wireless Electrocardiograms	Waltenegus Dargie	Waltenegus Dargie and Jannis Lilienthal
							Application of Tensor Decomposition in Removing Motion Artifacts from the Measurements of a Wireless Electrocardiogram	Waltenegus Dargie	Jannis Lilienthal and Waltenegus Dargie
							AwezaMed: A Multilingual, Multimodal Speech-To-Speech Translation Application for Maternal	Laurette Marais	Laurette Marais, Johannes Louw, Jaco Badenhorst, Karen Calteaux, Ilana Wilken, Nina Van Niekerk, Glenn Stein
		4	P10	Fusion Using Semantic Information	Joachim Biermann	Elisa Shahbazian	Kalman Filter Meets Subjective Logic: A Self-Assessing Kalman Filter Using Subjective Logic	Thomas Griebel	Thomas Griebel, Johannes Müller, Michael Buchholz and Klaus Dietmayer
							Fuzzy MLNs and QSTAGs For Activity Recognition and Modelling with RUSH	Van Nguyen	Van Nguyen and Liam Mellor
							Conceptual Space Modeling for Space Event Characterization	Jeremy Chapman	Jeremy Chapman, David Kasmier, David Limbaugh, Stephen Gagnon, John Crassidis, James Llinas, Barry Smith and Alexander Cox
		5	SS06-2	Advances in Motion Estimation 2 - Motion Analysis	Manon Kok	Manon Kok	A Two-stage Particle Filter for Equality Constrained Systems	Chongyang Hu	Chongyang Hu, Yan Liang and Linfeng Xu
							Kalman Filter with Moving Reference for Jump-Free, Multi-Sensor Odometry with Application in Autonomous Driving	Constantin Wellhausen	Joachim Clemens, Constantin Wellhausen, Tom Lucas Koller, Udo Frese and Kerstin Schill
							Line-of-Sight Rate Estimation for Barrel-Roll Maneuvering Target Tracking	Xiaoxiao Guo	Xiaoxiao Guo and Jian Lan
							Integrated Expected Likelihood Particle Filters	Michael Ransom	Michael Ransom, Lyudmil Vladimirov, Paul Horridge, Jason Ralph and Simon Maskell
							Uncertainty based active learning with deep neural networks for inertial gait analysis	Bertram Taetz	Alexander Vaith, Bertram Taetz and Gabriele Bleser

Day	Block #	Track #	ID	Session Title	EAST Q&A Session Chair	WEST Q&A Session Chair	Presentation titles	Speaker	Authors	
Thursday, Jul 9	C	1	P20	Video Tracking	Ng Gee Wah	Terence van Zyl	Deep Bidirectional Correlation Filters for Visual Object Tracking	Sajid Javed	Sajid Javed, Xiaoxiong Zhang, Lakmal Seneviratne, Jorge Dias and Naoufel Werghi	
							Robust and Efficient Image Alignment Method Using the Student-t Distribution	Yifan Zhou	Yifan Zhou and Simon Maskell	
							A Hypothesis-Optimized RANSAC Algorithm for Track Initiation	Yujuan Luo	Feng Yang, Yujuan Luo, Qiang Li and Yuming Yin	
							Vision-based Lifting of 2D Object Detections for Automated Driving	Hendrik Königshof	Hendrik Königshof, Kun Li and Christoph Stiller	
		2	S09	Directional Estimation	Uwe Hanebeck	Florian Pfaff	A Unified Model For Skewed Circular Data	Najmeh Nakhaeirad	Najmeh Nakhaeirad, Andriette Bekker and Mohammad Arashi	
							A Hyperhemispherical Grid Filter for Orientation Estimation	Florian Pfaff	Florian Pfaff, Kailai Li and Uwe Hanebeck	
							Dual Quaternion Sample Reduction for SE(2) Estimation	Kailai Li	Kailai Li, Florian Pfaff and Uwe Hanebeck	
							Circular estimation of the flow velocity using coherent Doppler sonar	Guillaume Fromant	Guillaume Fromant, Georges Stienne and Serge Reboul	
		3	S11	Intelligence for Situation Understanding and Sensemaking	Kellyn Rein	Kellyn Rein	Is hybrid AI suited for hybrid threats? Insights from social media analysis	Valentina Dragos	Valentina Dragos, Bruce Forrester and Kellyn Rein	
							Predictive Model of Total Electron Content during Moderately Disturbed Geomagnetic Conditions for GNSS Positioning Performance	Renato Filjar	Renato Filjar, Adam Weintrit, Teodor B Iliev, Goran Malčić, Oliver Jukić and Nenad Sikirica	
							Robust Terrain-Aided Navigation through Sensor Fusion	Maarten Lager	Mårten Lager, Elin Anna Topp and Jacek Malec	
							Towards Neural Situation Evolution Modeling: Learning a Distributed Representation for Predicting Complex Event Sequences	Andrea Salfinger	Andrea Salfinger and Lauro Snidaro	
		4	P06	Outdoor Localization	Simon Godsill	Ting Yuan	Observability in target motion analysis from the sum or the difference of ranges with two stationary sensors	Claude Jauffret	Annie-Claude Perez and Claude Jauffret	
							Covariance Estimation for Factor Graph Based Bayesian Estimation	Clark Taylor	O. Arda Vanli and Clark Taylor	
							Towards Controllability Analysis of Dynamic Networks Using Minimum Dominating Set	Ronald Hagan	Ronald Hagan, Stephen Grady, Charles Phillips, Bradley Rhodes and Michael Langston	
							Accuracy Study on Shooter Localization Using Incomplete Acoustic Measurements	Luisa Still	Luisa Still, Marc Oispuu and Wolfgang Koch	
		5		-- none --						