

# **2017 IEEE International Symposium on Signal Processing and Information Technology (ISSPIT 2017)**

**Bilbao, Spain  
18 – 20 December 2017**



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# ISSPIT 2017 - Bilbao, Spain

## University of Deusto

### Auditorio Icaza (La Comercial Building)

#### Registration

DAY 1: Monday, December 18<sup>th</sup>: 9.30 - 10.00: Registration  
 DAY 2: Tuesday, December 19<sup>th</sup>: 9.30 - 10.00: Registration  
 DAY 3: Wednesday, December 20<sup>th</sup>: 9.30 - 10.00: Registration

#### Technical program: Synopsis

Time	Day 1	Day 2	Day 3
9.30 - 10.00	Registration	Registration	Registration
10:00 - 10:30	PLENARY talk Prof. Hichem Frigui	PLENARY talk Prof. F. Lupiañez	PLENARY talk Prof. Pablo Garcia Bringas
10:30 - 11:30	Digital Signal Processing	Computational Methods	Bio-Informatics
11:30 - 11:45	Coffee Break	Coffee Break	Coffee Break
11:45 - 13:00	Digital Signal Processing	Computational Methods	Bio-Informatics
13:00 - 14:00	Lunch	Lunch	Bio-Informatics
14:00 - 16:00	Digital Signal Processing	Computational Methods	FINAL talk Prof. A. Elmaghraby (14:00-14:30)
16:00 - 16:15	Coffee Break	Coffee Break	
16:15 - 17:45	Digital Signal Processing	Computational Methods	
	19:00 Guided tour of Bilbao	19:30 - 23:00 Gala dinner - Abando Hotel	

#### Oral presentations:

10 minutes' presentation and 5 minutes' questions in "Auditorio Icaza" room.

#### Online/Video session:

December 20<sup>th</sup> from 10:45 - 14:00. Video presentation 7 - 10 minutes.



## Technical program: Schedule

### DAY 1: Monday, December 18<sup>th</sup>

Session: Digital Signal Processing, Image processing, Signals, Sensors, Devices

Time: 10:30 - 12:00

Code	Title	Registered author
1570390825	Local Linear Predictive Coding for High Resolution Time-Frequency Analysis...1	Fumihiko Ishiyama
1570391189	Sequential Combinations of Multiple Adaptive Lattice Filters in Cognitive Radio Channel Identification...7	Mehmet T. Ozden
1570399658	An Ensemble Feature Selection Method for Biomarker Discovery...416	Hichem Frigui
1570396570	An Adaptive Background Subtraction Scheme for Video Surveillance Systems...13	Nithin Varghese George
1570397059	Blind Forensics Tool of Falsification for RAW Images...18	Thi Ngoc Canh Doan
1570398800	Examining Feature Vector for Phoneme Recognition...394	Bozena Kostek

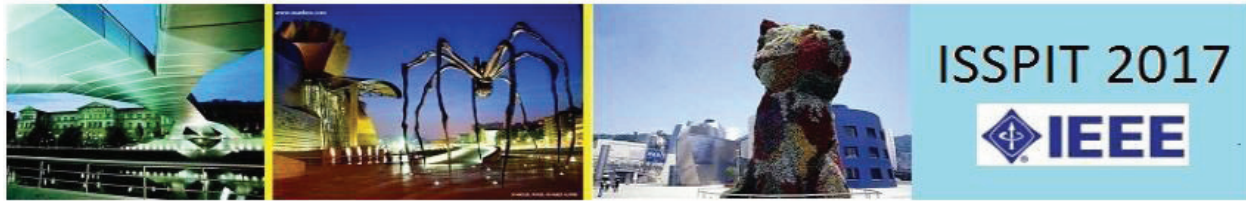
### *Coffee break: 11:30 - 11:45*

Session: Digital Signal Processing, Image processing, Signals, Sensors, Devices

Time: 11:45 - 13:30

Code	Title	Registered author
1570398321	Study on Spectral Efficiency for STBC-CPM with Two and Four Transmit Antennas...30	Kazuyuki Morioka
1570398579	The Gestalt Interest Points Distance Feature for Compact and Accurate Image Description...35	Markus Hörhan
1570398663	Jamming Signals Classification Using Convolutional Neural Network...62	Yanlong Zhao
1570398668	Face Recognition by Thermal Video Using 3D Information and Vesselness Features...68	K. T. Nguyen
1570398770	Experimental Demonstration of Autonomous Spectrum Balancing in G.fast...83	Martin Wolkerstorfer
1570403830	Estimating the Trajectory of a Thrown Object from Video Signal with Use of Genetic Programming...134	Ruslan Gayanov
1570397254	Radar Environment Characterization by Signal Processing Techniques...24	Gaspere Galati

### *Lunch Break: 13:00 - 14:00*



**Session:** Digital Signal Processing, Image processing, Signals, Sensors, Devices  
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1570400533	A Genetic Algorithm for Compressive Sensing Sparse Recovery...106	Miguel Heredia Conde
1570398604	Noise Characteristics in Extreme Shallow Water with Relation to Ship Maneuvering Parameters...40	Ammar Aljuhne
1570398610	On the Evaluation of Cost Functions for Parameter Optimization of a Multiscale Shape Descriptor...45	Fátima N. Sombra Medeiros
1570398622	Multiple Face Tracking Method in the Wild Using Color Histogram Features...51	Hyuk Jin Kwon
1570398703	S-Rep Model for Fundus Image Analysis...78	Luca Surace
1570398795	Image Tone Mapping Approach Using Essentially Non-Oscillatory Bi-quadratic Interpolations Combined with a Weighting Coefficients Strategy...89	Ba Chien Thai

*Coffee break: 16:00 - 16:15*

**Session:** Digital Signal Processing, Image processing, Signals, Sensors, Devices  
**Time:** 16:15 - 18:00

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1570403664	Detecting Maneuvers in Maritime Observation Data with CUSUM...122	Arne Lamm
1570403753	Electric Current Prediction for the Nonlinear High Power Loads Using Narx Neural Networks...128	Manuela Panoiu
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1570410858	Automatic Colon Polyp Detection Using Convolutional Encoder-Decoder Model...445	Ornela Bardhi
1570398572	Joint Blind Source Separation and Declipping: A Geometric Approach for Time Disjoint Sources...220	Alastair Turl
1570398741	Human Gait Recognition Based on Frontal View Using Kinect Features and Orthogonal Least Square Selection...388	Nooritawati Md Tahir
1570403777	Speech Enhancement in Modulation Domain Using Discriminative Random Fields...428	Ajey Saligrama

*Guided tourist visit of Bilbao: 19:00*



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Session: Computational Methods, Algorithms, Internet of Things, Cloud, Communications, Procedures

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1570385776	Fast Deep Pyramid DPM Object Detection with Region Proposal Networks...168	Bappaditya Dey
1570393819	Sparse Framework for Hybrid TDOA/DOA Multiple Emitter Localization...174	Anastasia Lavrenko
1570393856	Impact of Impulsive Noise on 4G OFDM and SCFDMA Systems...180	Hasan Saed Abuhilal

*Coffee break: 11:30 - 11:45*

Session: Computational Methods, Algorithms, Internet of Things, Cloud, Communications, Procedures

Time: 11:45 - 13:00

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1570396535	Online Least Angle Regression Algorithm for Sparse System Identification...191	Nithin Varghese George
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1570398315	Coding Efficiency Improvement by Wavelet Super-Resolution Restoration for 8K UHD TV Broadcasting...205	Yasutaka Matsuo
1570398424	LMS-Based Leader Selection for Distributed Estimation...211	Sander Ulp

*Lunch Break: 13:00 - 14:00*



Session: Computational Methods, Algorithms, Internet of Things, Cloud, Communications, Procedures

Time: 14:00 - 16:00

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*Coffee break: 16:00 - 16:15*

Session: Computational Methods, Algorithms, Internet of Things, Cloud, Communications, Procedures

Time: 16:30 - 18:00

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1570403509	Sparse Representation Based Classification with Intra-Class Variation Dictionary on Symmetric Positive Definite Manifolds...255	Hiroyuki Kasai
1570403818	Algorithm Modification of the Level-by-Level Approximation to the Minimum Route...270	Konstantin Mironov
1570403859	A DSS Model for IoT-based Intelligent Transportation Systems...276	Zacharenia Garofalaki
1570403892	LcwtNet: Lifting Complex Wavelet Layers for Constructing a Compact DNN Model...288	Shigeru Takano
1570398727	EMOSIC - An Emotion Based Music Player for Android...371	Manasi Arun

*Gala dinner: 19:30 - 23:00*

*Abando Hotel (address: Colon de Larreategui, 9, 48001 Bilbao). "Blueizar" restaurant*



### DAY3: Wednesday, December 20<sup>th</sup>

**Session:** Bio-Informatics, Biological Signals, Medical and Health Related Topics

**Time:** 10:30 - 11:30

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1570379860	A Reduced Complexity MFCC-based Deep Neural Network Approach for Speech Enhancement...331	Ryan Razani
1570381588	Denoising ECG Signal by Complete EEMD Adaptive Noise...337	Fakheraldin Y. O. Abdalla
1570398732	Investigating the Impact of the Training Data Volume for Robust Speech Recognition Using Multi-Task Learning...382	Gueorgui Pironkov

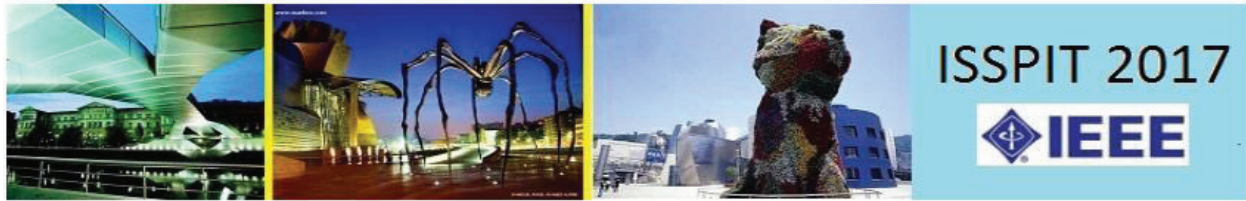
*Coffee break: 11:30 - 11:45*

**Session:** Bio-Informatics, Biological Signals, Medical and Health Related Topics

**Time:** 11:45 - 14:00

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1570398811	A New Approach to Two-Dimensional Filter for Segmenting Retinal Vascular Network from Fundus Images of Premature Born...405	Julio Ibarra-Fiallo
1570403556	Lung Tumour Motion Tracking Using a Weighted Optical Flow Algorithm with Linear Accelerator Gantry Rotation...422	Stephen Pistorius
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1570397828	Influence on Electroencephalogram at the Prefrontal Cortex Due to Tinnitus and Sounds...343	Masashi Matsuoka
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Room 2

Online Session

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1570413741	Cognitive Performance Application...317	Ahmed Desoky
1570403701	A Novel Approach for Classification of Hand Movements Using Surface EMG Signals...265	Muhammad Zia ur Rehman
1570417460	Simulation and Development of a System for the Analysis of Pressure Ulcers...453	Cristián Castillo
1570410497	Multimodal Biometric Systems: A Systematic Review...439	Roman Yampolskiy
1570404040	A FPGA Based Ultrasonic Rail Flaw Detection System...150	Wei Li
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## Technical program: Continued

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