

IWSSIP 2020 Preliminary Program

UTC-3	July 1st, 2020 (Wednesday)	July 2nd, 2020 (Thursday)		July 3rd, 2020 (Friday)	
09:00-09:30	Opening Ceremony (C1)	Technical Session (TS1)	Technical Session (TS2)	Technical Session (TS9)	Technical Session (TS10)
09:30-10:00					
10:00-10:30	Keynote Talk (KT1)	Technical Session (TS3)	Technical Session (TS4)	Technical Session (TS11)	Special Session (SC1)
10:30-11:00					
11:00-11:30	Keynote Talk (KT2)	Technical Session (TS5)	Technical Session (TS6)	Technical Session (TS12)	Special Session (SC2)
11:30-12:00					
12:00-12:30	Break	Break		Break	
12:30-13:00					
13:00-13:30	Keynote Talk (KT3)	Technical Session (TS7)	Technical Session (TS8)	Technical Session (TS13)	Technical Session (TS14)
13:30-14:00					
14:00-14:30	Tutorial (T1)	Technical Session (TS7)	Technical Session (TS8)	Technical Session (TS13)	Technical Session (TS14)
14:30-15:00					
15:00-15:30	Tutorial (T2)	Technical Session (TS7)	Technical Session (TS8)	Technical Session (TS13)	Technical Session (TS14)
15:30-16:00					

Ceremonies

- C1 Opening Ceremony
- C2 Closing and Award Ceremony

Plenary Speaker and Keynote Talk

- PS Prof. Branka Zovko-Cihlar
- KT1 Prof. Panos Liatsis
- KT2 Prof. Jonathan Huang
- KT3 Prof. Javier Felip Leon

Tutorial

- T1 Prof. Aristófanés Correa Silva and Prof. Luis Fernando Marin
- T2 Prof. Andre B. Cavalcante

Technical Session

- TS1 Biomedical Signal Processing and Analysis I
- TS2 Image-Based Detection, Recognition and Classification I
- TS3 Biomedical Signal Processing and Analysis II
- TS4 Image-Based Detection, Recognition and Classification II
- TS5 Signal Processing
- TS6 Image Processing I
- TS7 Machine Learning & Prediction
- TS8 Image Processing II
- TS9 Biomedical Signal Processing and Analysis III
- TS10 Face Recognition and Biometry
- TS11 Biomedical Signal Processing and Analysis IV
- TS12 Speech and Audio Processing
- TS13 Networks and Wireless Communications
- TS14 Human Computer Interaction and Education

Special Session

- SC1 Signal and Image Processing for Smart Cities I
- SC2 Signal and Image Processing for Smart Cities II

ID	Title	Session	Theme
3	Self-Reading by Speech: An End-to-end Speech Recognition Method Applied to the Energy Consumption Measurement on Mobile Devices	TS12	Speech and Audio Processing
7	Image Enhancement Applied to Water Holding Capacity Images	TS6	Image Processing
8	Shape Classification Using Randomized Neural Network Descriptors Extracted from the Fourier Spectrum	TS2	Image-Based Detection, Recognition and Classification
10	Virus Classification by using a Fusion of Texture Analysis Methods	TS2	Image-Based Detection, Recognition and Classification
14	Functional and Effective Connectivity Characterization of Absence Seizures	TS1	Biomedical Signal Processing and Analysis
15	Automatic Attendance Management System based on Deep One-Shot Learning	TS10	Face Recognition and Biometry
18	Open-set Face Recognition for Small Galleries Using Siamese Networks	TS10	Face Recognition and Biometry
21	Watermark Detection and Clearance in Video Using Simple Signal and Image Processing Techniques	TS6	Image Processing
23	Cubic Law and MAP Compensation Techniques for Robust Text-Independent Speaker Identification	TS12	Speech and Audio Processing
24	Automated Nuclei Segmentation on Dysplastic Oral Tissues Using CNN	TS1	Biomedical Signal Processing and Analysis
26	Parameterizing Variational Methods through Data-Driven Inverse Problems for Image Processing Applications	TS6	Image Processing
30	LATOR: Link-Quality Aware and Thermal Aware On-Demand Routing Protocol for WBAN	TS13	Networks and Wireless Communications
32	Segmentation of Plantar Foot Thermal Images: Application to Diabetic Foot Diagnosis	TS1	Biomedical Signal Processing and Analysis
35	Contextual Features and Sequence Labeling Techniques for Relevance Prediction in Retrieval	TS7	Machine Learning & Prediction
43	Improving Musical Tag Annotation with Stacking and Convolutional Neural Networks	TS12	Speech and Audio Processing
44	Smart Detection-IoT: A DDoS Sensor System for Internet of Things	TS13	Networks and Wireless Communications
46	Improvement of Ultrasonic Image by a Combination of Correlation-Based Image Processing and Virtual Sources Applied to Non-Destructive Evaluation	TS6	Image Processing
50	Design of a Full Polarimetric GPR System for Landmine Detection	TS5	Signal Processing
52	Energy Reconstruction Performance in the ATLAS Tile Calorimeter Operating at High Event Rate Conditions Using LHC Collision Data	TS5	Signal Processing
53	An Empirical Evaluation of Sharpening Filters Applied to Magnified Images	TS6	Image Processing
54	Novelty Detection in Power Quality Signals with Surrogates: a Time-Frequency Technique	TS5	Signal Processing
56	Music4All: A New Music Database and its Applications	TS12	Speech and Audio Processing
57	Data Augmentation for Face Recognition with CNN Transfer Learning	TS10	Face Recognition and Biometry
60	Banknote Identification Methodology for Visually Impaired People	TS2	Image-Based Detection, Recognition and Classification
65	Multilevel CNN for Angle Closure Glaucoma Detection using AS-OCT Images	TS1	Biomedical Signal Processing and Analysis
69	Determining the Direction of Images Using Sum and Difference Histograms and Texture Descriptors	TS8	Image Processing
75	ROI Extraction in Thermographic Breast Images Using Genetic Algorithms	TS1	Biomedical Signal Processing and Analysis
76	Automatic Prostate Segmentation on 3D MRI Scans Using Convolutional Neural Networks with Residual Connections and Superpixels	TS3	Biomedical Signal Processing and Analysis
77	Hybrid Capsule Network Architecture Estimation for Melanoma Detection	TS3	Biomedical Signal Processing and Analysis
78	SpaceYNet: A Novel Approach to Pose and Depth-Scene Regression Simultaneously	TS8	Image Processing
80	Ocular Recognition Using Deep Features for Identity Authentication	TS10	Face Recognition and Biometry
83	A Survey on Performance Metrics for Object-Detection Algorithms	TS2	Image-Based Detection, Recognition and Classification
84	Addressing Class Imbalance in Image-Based Plant Disease Detection: Deep Generative vs. Sampling-Based Approaches	TS2	Image-Based Detection, Recognition and Classification
88	Analysis of Features for Breast Cancer Recognition in Different Magnifications of Histopathological Images	TS3	Biomedical Signal Processing and Analysis
90	Automatic Sinusoidal Curves Detection in Borehole Images Using the Iterated Local Search Algorithm	TS4	Image-Based Detection, Recognition and Classification
91	Graphical Oracles to Assess Computer-Aided Diagnosis Systems: A Case Study in Mammogram Masses and Calcifications Detection	TS3	Biomedical Signal Processing and Analysis
92	Improving Active Shape Models Robustness Towards Locating Facial Landmarks In Profile Contour	TS10	Face Recognition and Biometry
93	Evaluating the Impact of Polygonal Representations on Mass Classification	TS9	Biomedical Signal Processing and Analysis
94	Dense Crowd Counting with Capsule Networks	TS4	Image-Based Detection, Recognition and Classification
95	Convolution Neural Network Models for Acute Leukemia Diagnosis	TS9	Biomedical Signal Processing and Analysis
96	An Exploratory Study Using Stream Learning Algorithms to Predict Duration Time of Vehicle Routes	TS7	Machine Learning & Prediction
97	Ensemble of Bidirectional Recurrent Networks and Random Forests for Protein Secondary Structure Prediction	TS7	Machine Learning & Prediction
98	Analysis of Non-Conformity in Flexible Pipe through Data Mining from Image Bank	TS4	Image-Based Detection, Recognition and Classification
99	Identification and Classification of Corrupted Signals for the Neutrinos Angra Experiment	TS5	Signal Processing
100	Machine Learning in Information Visualization: Using Rule-based Learning Algorithms to Personalize Interfaces	TS14	Human Computer Interaction and Education
102	Amplitude Estimators Applied to Saturated Signals for the v-Angra Experiment	TS5	Signal Processing
104	Optimizing CNN's using Cumulative Learning with Auxiliary Networks for Traffic Light Recognition	TS4	Image-Based Detection, Recognition and Classification
106	Combined Sustained Vowels Improve the Performance of the Haar Wavelet for Pathological Voice Characterization	TS12	Speech and Audio Processing
107	A Skin Lesion Semi-Supervised Segmentation Method	TS9	Biomedical Signal Processing and Analysis
108	DuaLANet: Dual Lesion Attention Network for Thoracic Disease Classification in Chest X-Rays	TS9	Biomedical Signal Processing and Analysis
111	Taxonomic Indexes for Automatic Prostate Segmentation on 3D MRI Scans Using Superpixels and Probabilistic Atlas	TS9	Biomedical Signal Processing and Analysis
112	UAV-Multispectral Sensed Data Band Co-Registration Framework	TS8	Image Processing
115	Recent Advances in Overcoming the Independence Assumption in Adaptive Filtering Analyses	TS7	Machine Learning & Prediction
123	Transfer Learning Method Evaluation for Automatic Pediatric Chest X-Ray Image Segmentation	TS11	Biomedical Signal Processing and Analysis
124	Comparing the Degeneration of the Corpus Callosum by Magnetic Resonance Images	TS11	Biomedical Signal Processing and Analysis
125	CORELA Collaborative Learning Environment for Electrical Engineering Education	TS14	Human Computer Interaction and Education
126	A Non Linear Registration Without the Use of the Brightness Constancy Hypothesis	TS11	Biomedical Signal Processing and Analysis
132	Mask Overlaying: A Deep Learning Approach for Individual Optic Cup Segmentation from Fundus Image	TS11	Biomedical Signal Processing and Analysis
133	The Comparison of Color Texture Features Extraction based on 1D GLCM with Deep Learning Methods	TS4	Image-Based Detection, Recognition and Classification
137	A Lightweight Reinforcement-Learning-based Mechanism for Bandwidth Provisioning on Multitenant Data Center	TS13	Networks and Wireless Communications
140	Wind Turbine Fault Detection: A Semi-Supervised Learning Approach With Automatic Evolutionary Feature Selection	TS7	Machine Learning & Prediction
142	EvolveDTree: Analyzing Student Dropout in Universities	TS14	Human Computer Interaction and Education
SC-02	Off-the-Shelf Based System for Urban Environment Video Analytics	SC1	Signal and Image Processing for Smart Cities
SC-03	The Augmented Space of a Smart City	SC1	Signal and Image Processing for Smart Cities
SC-04	BEM: A Framework based on Business Intelligence, Quality of Experience, and Car Park Management	SC1	Signal and Image Processing for Smart Cities
SC-05	Evaluation of Output Representations in Neural Network-based Trajectory Predictions Systems	SC1	Signal and Image Processing for Smart Cities
SC-06	A Methodology for Taxi Demand Prediction Using Stream Learning	SC1	Signal and Image Processing for Smart Cities
SC-07	Energy Consumption Prediction using Data Stream Learning for Commercial Buildings	SC2	Signal and Image Processing for Smart Cities
SC-09	Modelling and Certifying Smart Cities in Reo Circuits	SC2	Signal and Image Processing for Smart Cities
SC-10	An Experimental Analysis for Detecting Wi-Fi Network Associations Using Multi-label Learning	SC2	Signal and Image Processing for Smart Cities
SC-11	Demand-Side Management Framework for Smart Cities	SC2	Signal and Image Processing for Smart Cities