Preliminary Technical Program

Sunday June 26

AM

| 1200-1330 | Tutorial: P. Maragos |
| 1330-1530 | Lunch break |

PM

1530-1700	SUN-PM1: Smart Cities		
	SUM-PM1.1	Deep Learning for On-Street Parking Violation Prediction	Nikolaos Karantaglis, Nikolaos Passalis, Anastasios Tefas
	SUM-PM1.2	Image Driven Optimal Personalized Route Recommendation	Ioannis Sarridis, George Karantaidis, Constantine Kotropoulos
	SUM-PM1.3	Rain Estimation from Smart City's E-band Links	Roy Janco, Hagit Messer, Jonatan Ostrometzky
	SUM-PM1.4	Context Enhanced Traffic Segmentation: Traffic Jam and Road Surface Segmentation from Aerial Image	Yubo Wang, Zhao Wang, Yuusuke Nakano, Ken Nishimatsu, Katsuya Hasegawa; Jun Ohya
	SUN-PM1.5	Real-time Road Detection implementation of UNet Architecture for Autonomous Driving	Danut-Vasile V Giurgi Thomas Josso-Laurain, Maxime Devanne, Lauffenburger Jean-Phillippe
	SUN-PM1.6	Road Crack Detection Using Quaternion Neural Networks	Aggelos Katsaliros, Iason-Ioannis Panagos, Giorgos Sfikas, Christophoros Nikou
1700-1730	Coffee break		
1730-1900	SUN-PM2: Image Sythensis- Generation		
	SUN-PM2.1	Novel View Synthesis for Sparse RGB-D Camera Networks	Anh Minh Truong, Wilfried Philips, Nikos Deligiannis
	SUN-PM2.2	Temperature Estimation in Fusion Devices Using Machine Learning Techniques on Infrared Specular Synthetic Data	Alexis Juven, Marie-Hélène Aumeunier, Romain Brunet, Mickaël Le Bohec, Mouloud Adel, Roberto Miorelli, Xavier Artusi Christophe Reboud
	SUN-PM2.3	SinGAN-3D: Towards Unconditioned 3D Shapes Generation	Zeno Sambugaro, Nicola Conci, Marco Merlin
	SUN-PM2.4	An Architecture for the Detection of GAN-Generated Flood Images with Localization Capabilities	Jun Wang; Omran Alamayreh, Benedetta Tondi, Mauro Barni
	SUN-PM2.5	Joint Power and Contrast Shrinking in RGB Images with Exponential Smoothing	Maria Trigka, Elias Dritsas, Konstantinos Moustakas
	SUN-PM2.6	View-consistent 4D Light Field Style Transfer Using Neural Networks and Over-segmentation	Maryam Hamad, Caroline Conti, Paulo Nunes, Luis Ducla Soares

1900-2000	Opening ceremony		
2015-2115	Welcome reception		

Monday June 27

AM

0900-1000	Keynote 1: A. Dimakis		
1000-1130	MON-AM1: Biomedical Applications		
	MON-AM1.1	Classification of ECG Signals of Heart Beats using TF-TS LSTM with Augmented Fuzzy Recurrence Eigenvalues	Tuan Pham
	MON-AM1.2	A Large Imaging Database and Novel Deep Neural Architecture for Covid-19 Diagnosis	Anastasis Arsenos, Dimitrios Kollias, Stefanos Kollias
	MON-AM1.3	Federated learning for heart segmentation	Sébastien Jodogne, Thibaud Misonne
	MON-AM1.4	EndoVAE: Generating Endoscopic Images with a Variational Autoencoder	Dimitrios Diamantis, Panagiota Gatoula, Dimitris K Iakovidis
	MON-AM1.5	Proportional Myoelectric Control in Virtual Reality Environment	Iliana Loi, Angeliki Grammatikaki, Panagiotis Tsinganos, Efe Bozkir, Dimitris Ampeliotis, Konstantinos Moustakas, Enkelejda Kasneci, Athanassios Skodras
	MON-AM1.6	Sparse Analysis of Block-Boosted Deep Features for Osteoporosis Classification	Chelsea Harris, Sokratis Makrogiannis
1130-1200	Coffee break		
1200-1330	MON-AM2: Video Processing		
	MON-AM2.1	Virtual Validation of a Multi-object Tracker with Intercamera Tracking for Automotive Fisheye Based Surround View Systems	Guillem Delgado, Mikel Garcia, Marcos Nieto, Jon Ander Íñiguez de Gordoa, Cristina Pérez, Aleksandar Jevtic, David Pujol
	MON-AM2.2	Foveated MOVI-Codec: Foveation-based Deep Video Compression without Motion	Meixu Chen, Richard W. Webb, Alan Bovik
	MON-AM2.3	Explaining and Verifying the Robustness of Visual Object Trackers to Noise	Iason Karakostas, Vasileios Mygdalis, Ioannis Pitas
	MON-AM2.4	Identifying Pitfalls in the Evaluation of Saliency Models for Videos	Zhengyan Mr Dong, Xinbo Wu, Xin Zhao, Fan Zhang, Hantao Liu
	MON-AM2.5	VIDI: A Video Dataset of Incidents	Duygu Sesver, Alp Eren Gençoğlu, Çağrı Emre CE Yıldız, Zehra Nur Günindi, Faeze Habibi, Ziya Ata Yazıcı, Hazim Kemal Ekenel
	MON-AM2.6	Multimodal Video Summarization Based on Fuzzy Similarity Features	Theodoros Psallidas, Michael Vasilakakis, Evaggelos Spyrou, Dimitris Iakovidis

1330-1530	Lunch break			

PM

1530-1700	MON-PM1 (SS): Multimodal Analysis, Fusion, and Retrieval			
	MON-PM1.1	Sentinel-2 Images at 2.5m Spatial Resolution via Deep-Learning: A Case Study in Zakythnos	Antigoni Panagiotopoulou, Emmanuel Bratsolis, Lazaros Grammatikopoulos, Eleni Petsa, Eleni Charou, Konstantinos Poirazidis, Aristotelis Martinis, Nicholas Madamopoulos	
	MON-PM1.2	A Data Cube of Big Satellite Image Time-Series for Agriculture Monitoring	Vasileios Sitokonstantinou, Thanassis Drivas, Iason Tsardanidis, Alkiviadis Marios Koukos, Charalampos Kontoes, Vassilia Karathanassi	
	MON-PM1.3	SPARQL querying for validating the usage of automatically georeferenced social media data as human sensors for air quality	Stelios Andreadis, Mirette Elias, Thanassis Mavropoulos, Charis Papadopoulos, Nick Pantelidis, Ilias Gialampoukidis, Stefanos Vrochidis, Yiannis Kompatsiaris	
	MON-PM1.4	Pest Presence Prediction Using Interpretable Machine Learning	Ornela Nanushi, Vasileios Sitokonstantinou, Ilias Tsoumas, Charalampos Kontoes	
	MON-PM1.5	BiasHash: A Bayesian Hashing Framework for Image Retrieval	Maria Pegia, Anastasia Moumtzidou, Ilias Gialampoukidis Björn Þ Jónsson, Stefanos Vrochidis, Yiannis Kompatsiaris	
	MON-PM1.6	Towards Space-to-Ground Data Availability for the Monitoring of the Common Agricultural Policy	George Choumos, Alkiviadis Marios Koukos, Vasileios Sitokonstantinou,, Charalampos Kontoes	
1700-1730	Coffee break			
1730-1900	MON-PM2: Image Analysis			
	MON-PM2.1	A Comparative Study of Compressive Sensing Algorithms for Hyperspectral Imaging Reconstruction	Jon Alvarez Justo, Daniela Lupu, Milica Orlandic, Ion Necoara, Tor Arne Johansen	MON-PM2.1
	MON-PM2.2	LiDeR: Lightweight Dense Residual Network for Video Super-Resolution on Mobile Devices	Ekrem Çetinkaya, Minh Nguyen, Christian Timmerer	MON-PM2.2
	MON-PM2.3	Non-Uniform Blind Image Deblurring Using an Algorithm Unrolling Neural Network	Greig Richmond, Arlene Cole-Rhodes	MON-PM2.3
	MON-PM2.4	Gabor is Enough: Interpretable Deep Denoising with a Gabor Synthesis Dictionary Prior	Nikola Janjusevic, Amirhossein Khalilian-Gourtani, Yao Wang	MON-PM2.4
	MON-PM2.5	Efficient Hyperspectral Reconstruction from RGB Images with Line-Pixel Deconvolution	Pai Chet Ng , Konstantinos N. Plataniotis, Yannick Verdie, Juwei Lu	MON-PM2.5
	MON-PM2.6	Going from Lines to Triangles: A Formulation for Time-frequency Moments of Time-Series With Application to Study fMRI	Ashkan Faghiri, Armin Iraji, Noah Lewis, Koko Ishizuka, Kun Yang, Akira Sawa, Tulay Adali, Vince Calhoun	MON-PM2.6

Tuesday June 27

AM

0900-1000	TUE-AM1 (SS): Multispectral Sensing and Surveillance Applications			
	TUE-AM1.1	Recognizing the Threats of Drone Surveillance. A Case Study	Dimitrios Lappas, George Fessakis, Panagiotis Karampelas	

	TUE-AM1.2	Towards using Thermal Cameras in Birth Detection	Jorge García-Torres, Øyvind Meinich-Bache, Kjersti Engan
	TUE-AM1.3	Location-Aided Activity Recognition from Channel State Information with Deep Cross-Modal Learning	Shervin Mehryar
	TUE-AM1.4	SAR Image Classification with Knowledge Distillation and Class Balancing for Long-Tailed Distributions	Chowdhury Sadman Jahan, Andreas Savakis, Erik Blasch
1000-1130	TUE-AM2: Face, Gesture, Action, Emotion Recognition		
	TUE-AM2.1	Gesture Recognition by Self-Supervised Moving Interest Point Completion for CNN-LSTMs	Fotini Patrona, Ioannis Mademlis, Ioannis Pitas
	TUE-AM2.2	Monocular Weakly-Supervised Camera-Relative 3D Human Pose Estimation	Anestis Christidis, Christos Papaioannidis, Ioannis Pitas
	TUE-AM2.3	Context-Aware Memory Attention Network for Video-Based Action Recognition	Thean Chun Koh
	TUE-AM2.4	Audio-Video Fusion with Double Attention for Multimodal Emotion Recognition	Ruxandra G. Tapu, Bogdan Mocanu
	TUE-AM2.5	Cartoonized Anonymization of Sign Language Videos	Chirstina Ourania Tze, Panagiotis P. Filntisis, Anastasios Roussos, Petros Maragos
	TUE-AM2.6	Attribute-based Gesture Recognition: Generalization to Unseen Classes	George Retsinas, Panagiotis P. Filntisis, Nikolaos Kardaris, Petros Maragos
1130-1200	Coffee break		
1200-1330	TUE-AM3: Applications		
	TUE-AM3.1	Dynamic Tomography Reconstruction by Projection-Domain Separable Modeling	Berk Iskender, Marc Louis Klasky, Yoram Bresler
	TUE-AM3.2	Multi-object Visual Tracking for Indoor Images of Retail Consumers	Iason-Ioannis Panagos, Angelos P. Giotis, Christophoros Nikou
	TUE-AM3.3	Early Detection of DDoS Attacks Using Photonic Neural Networks	Manos Kirtas, Nikolaos Passalis, Dimitrios Kalavrouziotis, Dimitrios Syrivelis, Paraskeuas Bakopoulos, Nikolaos Pleros, Anastasios Tefas
	TUE-AM3.4	Adversarial Deep Features for Weakly Supervised Document Image Keyword Spotting	Angelos P. Giotis, Giorgos Sfikas, Christophoros Nikou
	TUE-AM3.5	Multi-scale Wavelet Frequency Channel Attention on Remote Sensing Image Segmentation	Yu-Chen Su, Tsung-Jung Liu, Kuan-Hsien Liu
	TUE-AM3.6	A Framework to Map VMAF with the Probability of Just Noticeable Difference between Video Encoding Recipes	Jingwen Zhu, Suiyi Ling, Yoann Baveye, Patrick Le Callet
1330-1530	Lunch break		

PM

1530-1700	TUE-PM1: Autonomous Vehicles		

	TUE-PM1.1	Parting With Illusions About Synthetic Data	Daniel Pototzky, Azhar Sultan, (Robert Bosch GmbH); Lars Schmidt-Thieme (Universität Hildesheim)
	TUE-PM1.2	Does Self-Supervised Pretraining Really Match ImageNet Weights?	Daniel Pototzky (Robert Bosch GmbH)*; Azhar Sultan (Robert Bosch GmbH); Lars Schmidt-Thieme (Universität Hildesheim)
	TUE-PM1.3	On the Detection of Powerline Elements with Efficient Transformers	Emmanouil Patsiouras (Aristotle University of Thessaloniki)*; Vasileios Mygdalis (Aristotle University of Thessaloniki); Ioannis Pitas (Aristotle University of Thessaloniki)
	TUE-PM1.4	Drone Footage Wind Turbine Surface Damage Detection	Ashley Foster (University of Plymouth)*; Oscar Best (University of Plymouth); Mario Gianni (Plymouth University); Asiya Khan (University of Plymouth); Keri Collins (University of Plymouth); Sanjay Sharma (University of Plymouth)
	TUE-PM1.5	Robust 4D Awareness via Diffusion Adaptation over Connected and Autonomated Vehicles	Nikos Piperigkos (University of Patras/ATHENA Research Center)*; Stavros Nousias (Industrial Systems Institute, Athena Research Center); Aris Lalos (Industrial Systems Institute, Athena Research Center)
	TUE-PM1.6	A Cooperative LiDAR-Camera Scheme for Extrinsic Calibration	Georgios Zamanakos (Democritus University of Thrace)*; Lazaros Tsochatzidis (Democritus University of Thrace); Angelos Amanatiadis (Department of Production and Management Engineering, Democritus University of Thrace); Ioannis Pratikakis (Democritus University of Thrace)
1700-1730	Coffee break		
1730-1900	Keynote 2: A. Zakhor		
2000-2200	Banquet		

Wednesday June 29

AM

0900-1000	Keynote 3: I. Katsavounidis		
1000-1130	WED-AM1: Digital Pathology (SS)		
	WED-AM1.1	HUNIS: High-Performance Unsupervised Nuclei Instance Segmentation	Vasileios Magoulianitis, Yijing Yang, C.-C. Jay Kuo
	WED-AM1.2	MULTI-RESOLUTION FRAMEWORK FOR SPITZOID NEOPLASM CLASSIFICATION USING HISTOLOGICAL DATA	Rocio del Amor, Francisco Javier Curieses, Laëtitia Launet, Adrián Colomer, Anaïs Moscardó, Andrés Mosquera-Zamudio, Carlos Monteagudo, Valery Naranjo
	WED-AM1.3	Quantifying the effect of color processing on blood and damaged tissue detection in Whole Slide Images	Neel Kanwal, Saul Fuster, Farbod Khroaminia, Chunming Rong, Tahlita C.M. Zuiverloon, Kjersti Engan
	WED-AM1.4	Invasive Cancerous Area Detection in Non-Muscle Invasive Bladder Cancer Whole Slide Images	Saul Fuster, Farbod Khoraminia, Umay Kiraz, Neel Kanwal, Vebjørn Kvikstad, Trygve Eftestøl, Tahlita C.M. Zuiverloon, Emilius A. M. Janssen, Kjersti Engan
	WED-AM1.5	Residual block Convolutional Auto Encoder in Content- Based Medical Image Retrieval	Zahra Tabatabaei, Javier Oliver, Valery Naranjo, Kjersti Engan
	WED-AM1.6	Cascaded DNNs for detecting the position and orientation of Left Ventricle from 3D CT Scans	Magnus Caspersen, Md. Sayed Tanveer, ASM Shihavuddin, M M Mahbubul Syeed, Md. Hasan Maruf, Ashraful Amin, Faisal M. Uddin
1130-1200	Coffee break		
1200-1330	WED-AM2: Machine Learning - Deep Learning		

WED-AM2.1	Electric Load Demand Forecasting on Greek Energy Market Using Lightweight Neural Networks	Nikitas Maragkos, Maria Tzelepi, Nikolaos Passalis, Apostolos Adamakos, Anastasios Tefas
WED-AM2.2	Subclass Knowledge Distillation With Known Subclass Labels	Ahmad Sajedi, Yuri Lawryshyn, Konstantinos N. Plataniotis
WED-AM2.3	Light-weight CNN-based VVC Inter Partitioning Accelaration	Yiqun Liu, Mohsen Abdoli, Thomas Guionnet, Christine Guillemot, Aline Roumy
WED-AM2.4	Investigation of Deep Learning Architectures and Features for Adversarial Machine Learning Attacks in Modulation Classifications	Marios Aristodemou, Sangarapillai Lambotharan, Gan Zheng, Leonidas Aristodemou
WED-AM2.5	Multimodal Fusion of Brain Imaging Data With Joint Non-linear Independent Component Analysis	Oktay Agcaoglu, Rogers F. Silva, Vince Calhoun
WED-AM2.6	Federated Dictionary Learning from Non-IID Data	Alexandros Gkillas, Dimitris Ampeliotis, Kostas Berberidis