

ISTANBUL AREL UNIVERSITY



**18-19
APRIL
2018**

EBBT

**SCIENTIFIC MEETING on
ELECTRICAL-ELECTRONICS &
BIOMEDICAL ENGINEERING &
COMPUTER SCIENCE**

TEPEKENT CAMPUS - Prof. Dr. Aziz Sancar Conference Hall
Paper Submission: 19 January 2018



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EBBT 2018 TECHNICAL PROGRAM

(ISTANBUL AREL UNIVERSITY AZIZ SANCAR AMPHI)		
18 APRIL 2018, WEDNESDAY	09.30-11.00	OPENING:
		09.30 – 10.00 : REGISTRATION, Tea-Coffee 10.00 – 10.15 : OPENING 10.15 – 11.00 : Invited Speaker: <i>Prof. Dr. Haldun Akpınar</i> <i>'Data and Data Mining in Biomedical Informatics'</i>

(ISTANBUL AREL UNIVERSITY AZIZ SANCAR AMPHI)			
18 APRIL 2018, WEDNESDAY	11.00-12.45 <i>Session Chair: A. Deniz Duru</i>	1st SESSION	
		Authors	Title
		Amine Belaid, Boubekeur Mendil	11. Collision checking with high number of obstacles in sampling based motion planning
		Nabeel Seedat, Vered Aharonson, Ilana Schlesinger, Andre McDonald, Steven Dubowsky, Amos Korczyn	57. Feasibility of an Instrumented Walker to Quantify Treatment Effects on Parkinson's Patient Gait
		Ayat Nada, Mohamed Omar, Ahmed M. Sayed	29. Modeling of Continuous Dielectrophoretic Field Flow Separation of Blood Cells
		Nabeel Seedat, David Beder, Vered Aharonson, Steven Dubowsky	56. A Comparison of Footfall Detection Algorithms from Walker Mounted Sensors Data
		Tanmay Paul, Arnab Chakraborty, Subhrajit Kundu	85. Hybrid Shallow and Deep Learned Feature Mixture Model for Arrhythmia Classification
		Amirmasoud Ahmadi, Mahsa Behroozi, Vahid Shalchyan, Mohammad Reza Daliri	99. Classification of Epileptic EEG Signals by Wavelet based CFC
		Mahsa Behroozi, Mohammad Reza Daliri	101. A high performance VMD based SSVEP-BCI system
		12.45 - 13.30 :	

(ISTANBUL AREL UNIVERSITY AZIZ SANCAR AMPHI)			
18 APRIL 2018, WEDNESDAY	13:30-14.45 <i>Session Chair: Murat Demirer</i>	2nd SESSION	
		Authors	Title
		Mehmet İscan, Caner Emeç, Aydın Yeşildirek	33. Hand Gesture Movement Classification based on Dynamically Structured Neural Network
		Murat Arıcan, Kemal Polat	43. Neighborhood Based EEG Compression Method on P300 Speller Systems
		Can Erçelik, Denizhan Çeliker, Dilek Göksel Duru	136. Nabız Kontrollü Sürücü Güvenliği Uyarı Sistemi: Pilot Çalışma
		Vedat Tumen, Özal Yıldırım, Burhan Ergen	111. Sürüş Ortamında Sürücü Uykuluk Tespitinin Derin Öğrenme Yöntemleri Kullanarak Gerçekleştirilmesi
		Sema Arslan, Selen Güney, Kübra Tan, Selda Bereket Yücel, Hasan Birol Çotuk, Adil Deniz Duru	137. Event related potential responses to food pictures in hunger
		14.45 - 15.30: POSTER PRESENTATIONS –I / Tea-Coffee Break	

(ISTANBUL AREL UNIVERSITY AZIZ SANCAR AMPHI)			
18 APRIL 2018, WEDNESDAY	15:30-16.45 <i>Session Chair: Murat Tumer</i>	3rd SESSION	
		Authors	Title
		R. Murat Demirer, Oya Demirer	130. Spatio-temporal Phase Synchronizations in Very Low Frequency EEG Oscillations
		Mustafa Ersel Kamasak, Cem Özkaya	80. Analysis of Health Facilities Expenditures by Facility Parameters
		Yunus Torun, Zekeriya Öztemür, Ahmet Öztürk, Nursu Hatipoğlu	75. Breakthrough Detection for Orthopedic Bone Drilling via Power Spectral Density Estimation of Acoustic Emission
		Haydar Özkan	126. Skin Lesion Border Detection in Dermoscopic Images
		Berkant Aydemir, Hüseyin Akbulut, Murat Sükuti, Asuman Çevik, Adil Deniz Duru, Hasan Birol Çotuk	135. Remote Assesment of Heart Rate and its Fluctiations by Smartphone Camera

(ISTANBUL AREL UNIVERSITY AZIZ SANCAR AMPHI)			
		10.00-10.45 : Invited Speaker: Prof. Dr. Aydın Akan 'Signal Processing Methods in Biomedical Engineering'	
19 APRIL 2018, THURSDAY	10.45 – 12.45 Session Chair: Gökalp Tulum	1st SESSION	
		Authors	Title
		Şuayb Çağrı Yener, Reşat Mutlu	76. A Microcontroller-Based ECG Signal Generator Design Utilizing Microcontroller PWM Output and Experimental ECG Data
		Muhammed Kürşad Uçar, İnanç Moran, Deniz Turgay Altılar, Cahit Bilgin, Mehmet Recep Bozkurt	71. Rule-based diagnosis of chronic obstructive pulmonary disease with electrocardiogram signal
		Hülya Yalçın	108. Activity Recognition of Interacting People
		Ozan Teoman Dayanan, Ömer Yıldız and İrem Düzdar Argun	16. Comparison of Accuracy Values of Biomedical Data with Different Applications Decision Tree Method
		Cihangir Kolcu, Bülent Bolat	110. Detection of Walking Direction for Pedestrian
		Enes Yiğit, Abdurrahim Toktaş, Deniz Ustun, Kadir Sabancı, Hakan Işıker	41. 3D Level Measurement Design by Using Multil Static X-Band Radar
		İsmail Devocioğlu	59. Role of Mechanoreceptive Afferents in Two-Point Discrimination: A Simulation Based Modeling Study
		Fatih Kayaalp, Muhammet Sinan Başarslan and Kemal Polat	24. Kronik Böbrek Hastalığını Tanımlamada Bir Hibrit Sınıflandırma Örneği
12.45 – 13.30: Lunch Break			

(ISTANBUL AREL UNIVERSITY AZIZ SANCAR AMPHI)			
		2nd SESSION	
19 APRIL 2018, THURSDAY	13.30-14.45 Session Chair: Korhan Cengiz	Authors	Title
		Selman Uluşık, Fikret Yıldız, Ahmet Turan Özdemir	64. Image Processing Based Machine Vision System for Tomato Volume Estimation
		Hilmi Çam, Salim Akçakoca, Ahmet Elbir, Hamza İlhan, Nizamettin Aydın	125. The Performance Evaluation of the Cat and Particle Swarm Optimization Techniques in the Image Enhancement
		Enes Ayan, Halil Murat Ünver	93. Data Augmentation Importance for Classification of Skin Lesions via Deep Learning

		Zhaleh Sadreddini, Özge Makul, Faruk Baturalp Günay, Tuğrul Çavdar	22. Lisanslı Paylaşımli Erişime Dayalı İkincil Kullanıcı Faaliyetinin Bilişsel Radyo Ağlarında Performans Analizi
		Erdi Buluş, Demet Sezgin Mansuroğlu, Deniz İsmik, Yeşim Müge Şahin, Faik Nüzhet Oktar, Oğuzhan Gündüz, Hasan Gökçe	131. Başlıca Doku Mühendisliği Uygulamalarında Kullanılabilecek Biyoseramik Sentezi Ve Karakterizasyonu
		Saide İşilay Baykal, Deniz Bulut, Özgür Koray Şahingöz	115. Comparing Deep Learning Performance on BigData by using CPUs and GPUs
14.45 - 15.30: POSTER PRESENTATIONS –II / Tea-Coffee Break			

(ISTANBUL AREL UNIVERSITY AZIZ SANCAR AMPHI)			
19 APRIL 2018, THURSDAY	15.30-16.45 <i>Session Chair: Zhaleh Sadreddini</i>	3rd SESSION	
		Authors	Title
		Fatih Mehmet Tekcan, Tolga Ensari, Ahmet Sertbaş	58. Hyperspectral Image Classification with Spectral-Spatial Feature Extraction Methods
		Wessam Shehieb, Mohammed Osama Nasri, Nouredin Mohammed, Omar Debsi, Kamran Arshad	133. Intelligent Hearing System using Assistive Technology for Hearing-Impaired Patients
		Wessam Shehieb, Anas Al Bakri, Mohamed Yacine Lezzar, Mohammed Alzinati, Khaled Mortazavi, Tazeen Sharif	134. Intelligent Exoskeleton for Patients with Paralysis
		Omid Aligholipour, Mehmet Kuntalp	109. Clustering of PAF and non-PAF Subjects Based on Arrhythmia-Free Records
		Osman Ülkir, Gazi Akgün, Erkan Kaplanoğlu	68. Mechanical Design and Analysis of a Pneumatic Ankle Foot Orthosis
		16.45 – 16.50: CLOSING	

(ISTANBUL AREL UNIVERSITY AZIZ SANCAR AMPHI FOYER AREA)

		POSTER PRESENTATIONS-I	
		Authors	Title
18 APRIL 2018, WEDNESDAY (14.45-15.30)	Moustafa Kurdi	6- Proposed System of ANN for Positioning and Navigation of UAV-UGV	
	Muhammet Sinan Başarslan, İrem Düzdar Argun	19- Classification Of A Bank Data Set On Various Data Mining Platforms	
	Barış Karakaya, Vedat Çelik, Arif Gülten	37- Realization of Delayed Cellular Neural Network Model on Fpga	
	S. Hamed Javadi, Ali Peiravi	47- Distributed Detection in Serial and Parallel Configurations of Wireless Sensor Networks	
	Meriem Amrane, Ikram Gagaoua, Saliha Oukid, Tolga Ensari	49- Breast Cancer Classification Using Machine Learning	
	Zekeriya Anıl Güven, Banu Diri, Tolgahan Çakaloğlu	52- n-seviyeli Gizli Dirichlet Ayırımı ile Türkçe Tivit Duygularının Sınıflandırılması	
	Gülcan Yıldız, Doğan Yıldız	54- A New Approach to Reduce Salt-Pepper Noise Using A Fuzzy Set for Gray Level Images	
	Mehmet Korkmaz	74- Sosyal Medyada Üniversite Memnuniyeti Üzerine Duygu Analizi	
	Ahmet Atasoy, Shavkat Kuchimov, Ersin Toptaş, Erkan Kaplanoğlu, Burak Güçlü, Mehmet Özkan	113- ŞHA Eyleyici Tasarım Kriterleri	
	Hülya Yalçın	107- Phenology Recognition using Deep Learning: DeepPheno	
	Ayşenur Varlık, Nihal Senli, Rüya Samlı	17- Estimation Of Profession Group With Data Mining	

(ISTANBUL AREL UNIVERSITY AZIZ SANCAR AMPHI FOYER AREA)

		POSTER PRESENTATIONS-II	
		Author	Title
19 APRIL 2018, THURSDAY (14.45-15.30)	Safa Sadaghiyanfam	18- Using Gray-Level-Co-Occurrence Matrix and Wavelet Transform for Textural Fabric Defect Detection: A Comparison Study	
	Muhammet Sinan Başarslan, Fatih Kayaalp, Kemal Polat	23- K-Ortalamlar Tabanlı Zaman Serisi Ağırlıklandırma Yöntemi ile EEG Sinyallerinden Epilepsi Tahmini	
	Timur İnan, Fevzi Baba	32- En Kısa Yol Problemi Üzerinde Karınca Kolonisi Algoritmasının Performansının İncelenmesi (Ege Denizi Örneği)	
	Nasar Aldianshshoa Shashoa, Abdulmunem Almkhtar Almkhtar, İbrahim Jleta, Mohamed Hassan	34- Parameter Estimation and Residual Generation for (CARARMA) Model Depend on D-RGELS Algorithm	
	Fatma Gümüş, Derya Yılmaz-Kaplan	35- Prediction of Network Congestion via Machine Learning	
	Siyabend Turgut, Mustafa Dağtekin, Tolga Ensari	88- Microarray Breast Cancer Data Classification Using Machine Learning Methods	
	Yücel Yılmaz, Utku Köse, Sena Çelik, Şadi Fuat Çankaya, İbrahim Arda Çankaya	94- An Arduino Based System for Calculating the Average Life Time of a Person via Indoor Oxygen Content	
	Halil İbrahim Okur, Pelin Görgel, Ahmet Sertbaş	102- Segmentation On Digital Mammogram Images using Hibrid K-Means Clustering and Ant Colony Algorithms	
	Ahmet Elbir, Hamza İlhan, Görkem Serbes, Nizamettin Aydın	139- Short Time Fourier Transform Based Music Genre Classification	
	Melike Günay, Tolga Ensari	10- Makine Öğrenmesi Teknikleri ile Epilepsi Hastaları için EEG Sinyali Analizi	
	Gülây Çiçek, Aydın Akan	36- A New Method to Segment Gray and White Matter from MRI Brain Images	