

ISTANBUL AREL UNIVERSITY



**18-19
APRIL
2018**

EBBT

IEEE EMB
Turkey Section

**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>

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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 :	

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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	

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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 Assessment of Heart Rate and its Fluctuations 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 Işiker	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)			
19 APRIL 2018, THURSDAY	13.30-14.45 Session Chair: Korhan Cengiz	2nd SESSION	
		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)				
<i>3rd SESSION</i>				
Authors		Title		
19 APRIL 2018, THURSDAY	15.30-16.45 <i>Session Chair: Zhaleh Sadreddini</i>	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	
		Gökalp Tulum, Onur Osman, Özgür Dandin, Tuncer Ergin, Ferhat Cüce, Murathan Köksal	ManSeg 2.6b Uygulama Başarısının Değerlendirilmesi	
		16.45 – 16.50: CLOSING		

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18 APRIL 2018, WEDNESDAY (14.45-15.30)	<i>POSTER PRESENTATIONS-I</i>	
	Authors	Title
	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
	Bariş 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 Duyularının 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

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 Aldianshoshia 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

Gülşay Çiçek, Aydın Akan

36- Gray and White Matter Segmentation Method in MRI Images for ADHD Detection

19 APRIL 2018, THURSDAY

(14.45-15.30)