

**THE 5TH INTERNATIONAL
FUZZY SYSTEMS SYMPOSIUM
2017**

PROGRAMME

October 14 - 15, 2017

Ankara, Turkey

<http://fuzzyss2017.etu.edu.tr/>

Organized by

Fuzzy Systems Association

TOBB University of Economics & Technology

PROGRAMME OVERVIEW

Saturday, October 14, 2017

08.30 – 10.00	Registration
09.00 – 10.45	Opening Ceremony
10.45 – 11.00	Coffee Break
11.00 – 12.00	Invited Speaker
12.00 – 13.30	Lunch Break
13.30 – 14.15	Invited Speaker
14.15 – 14.30	Coffee Break
14.30 – 15.30	Contributed Paper Session I
15.30 – 15.45	Coffee Break
15.45 – 16.45	Contributed Paper Session II
16.45 – 17.00	Coffee Break
17.00 – 18.15	Contributed Paper Session III
18.30 –	Conference Dinner

Sunday, October 15, 2017

09.00 – 09.45	Invited Speaker
09.45 – 10.00	Coffee Break
10.00 – 11.00	Contributed Paper Session IV
11.00 – 11.15	Coffee Break
11.15 – 12.15	Contributed Paper Session V
12.15 – 13.30	Lunch Break
13.30 – 14.15	Invited Speaker
14.15 – 14.30	Coffee Break
14.30 – 15.30	Contributed Paper Session VI
15.30 – 15.45	Coffee Break
15.45 – 16.45	Contributed Paper Session VII
16.45 – 17.00	Coffee Break
17.00 – 18.00	Contributed Paper Session VIII
18.00 – 18.15	Coffee Break
18.15 – 19.30	Contributed Paper Session IX

DETAILED PROGRAMME

Saturday, October 14, 2017

Registration	08.30 – 10.00
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Opening Ceremony	09.00 – 10.45
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Coffee Break: 10.45 – 11.00

Invited Lecture Session	
<i>Ibrahim Ozkan</i>	11.00 – 12.00
<i>I. B. Turksen's 40 Years of Contributions to Fuzzy Logic and Fuzzy System Modelling</i>	

Lunch Break: 12.00 – 13.30

Invited Lecture Session	
<i>Adil Baykasoglu</i>	13.30 – 14.15
<i>Interval Type-2 Fuzzy Cognitive Maps</i>	

Coffee Break: 14.15 – 14.30

Contributed Paper Session I	14.30 – 15.30
Chair: Candan Gokceoglu Room: İsmail	October 14, 2017

Volkan Sonmez, Murat Caner Testik, Özlem Müge Testik	
<i>A Tool for Calculating Fuzzy and Interval Production Loss Measurements</i>	
14.30 – 14.45	

Burcu Felekoglu, Adil Baykasoglu, Ilker Golcuk	
<i>A Systematic Approach for Building and Analyzing Problem Solving Networks in Open Innovation</i>	
14.45 – 15.00	

Deniz Sönmez, Gürsel Yeşilot, Serkan Onar, Bayram Ali Ersoy	
<i>A Note on 2-Absorbing Primary Fuzzy Ideals</i>	
15.00 – 15.15	

Ahmet Egesoy	
<i>Choosing Fuzzy Operators for Real-life Engineering Applications</i>	
15.15 – 15.30	

Contributed Paper Session I**14.30 – 15.30****Chair:** Mehmet Karaköse **Room:** BurhanOctober 14, 2017

Yunus Santur, Mehmet Karaköse, Erhan Akin

*Fuzzy Logic Based Decision Making and Risk Analysis Approach for Railway Inspection*14.30 – 14.45

Canan Tastimur, Mehmet Karaköse, Erhan Akin

*Hierarchical Fuzzy System Based Classification Approach for Railway Components Using Vision Inspection*14.45 – 15.00

Mustafa Hamurcu, Tamer Eren

*Selection of Urban Rail Transport Type by Using Fuzzy AHP*15.00 – 15.15

Gulsah Karaduman, Mehmet Karaköse, Erhan Akin

*A Method of Using Fuzzy Decision Trees for Fault Diagnosis of Pantograph-Catenary Systems*15.15 – 15.30

Contributed Paper Session I**14.30 – 15.30****Chair:** Şebnem Yılmaz Balaman **Room:** TürkşenOctober 14, 2017

Esin Mukul, Merve Güler, Gülçin Büyüközkan

*Hesitant Fuzzy Linguistic COPRAS Method for Marketing Strategy Selection*14.30 – 14.45

M.Sami Sivri, Sevinç Özgün, Parmis Shah Maleki

*Interval Valued Hesitant Fuzzy Analytic Hierarchy Process and Its Application to Group Decision Making*14.45 – 15.00

Mucahit Karaduman, Muharrem Tuncay Gencoglu, Haluk Eren

*A Fuzzy Decision System for Car Fault Diagnosis Using Vibration Data*15.00 – 15.15

Sedef Çalı, Şebnem Yılmaz Balaman

*A Methodology for Analytic Customer Relationship Management: Integration of Intuitionistic Fuzzy ELECTRE and VIKOR*15.15 – 15.30

Coffee Break: 15.30 – 15.45

Contributed Paper Session II**15.45 – 16.45****Chair:** *Adnan Aktepe* **Room:** *İsmail*October 14, 2017

Duygun Fatih Demirel, Melek Başak

*A Higher Order Fuzzy Lee-Carter Method for Modeling Human Migration*15.45 – 16.00

Adnan Aktepe, Melda Kokoç, Süleyman Ersöz

*Determining Market Strategy by Using a Fuzzy Rule Based Algorithm*16.00 – 16.15

Nursin Bas Catak

*Numerical Solutions of Aggregation Processes Based on Fuzzy Markov Chains*16.15 – 16.30

Gültekin Atalık, Sevil Şentürk

*A Comparison Study of Fuzzy Logistic Regression Models with Different Criteria*16.30 – 16.45

Contributed Paper Session II**15.45 – 16.45****Chair:** *Şebnem Yılmaz Balaman* **Room:** *Burhan*October 14, 2017

Melika Mohsenizadeh, Elcin Kentel, Mustafa Kemal Tural

*Municipal Solid Waste Management with Cost Minimization and Emission Control Objectives*15.45 – 16.00

Busra Akarsu, Koray Sener Parlak, Alişan Sarimaden, Mehmet Karakose

*A Fuzzy Integration Approach for Feature Extraction Techniques in Image Processing Based Quality Control Applications*16.00 – 16.15

Şebnem Yılmaz Balaman, Daniel G.Wright, James Scott, Aristides Matopoulos

*A Fuzzy Optimization Framework for Design of Bio-Waste Based Energy Supply Chains*16.15 – 16.30

Şebnem Yılmaz Balaman, Daniel G.Wright, James Scott, Aristides Matopoulos

*A Methodology Based on Fuzzy ε -constraint Method for Integrated Optimization of Sustainable Supply Chains and Transportation Networks for Multi Technology Bio-based Production*16.30 – 16.45

Contributed Paper Session II**15.45 – 16.45****Chair: Bülent Çekiç Room: Türkşen**October 14, 2017

Mustafa Hamurcu, Tamer Eren

*A Hybrid Approach Based on Fuzzy AHP and TOPSIS for Selection of Academic Conference*15.45 – 16.00

Fatma Betül Yeni, Gökhan Özçelik

*An Extension of CODAS Method with Interval-Valued Intuitionistic Fuzzy Numbers*16.00 – 16.15

Erkan Celik, Emre Akyuz

*A Fuzzy SLIM Based Quantitative Risk Analysis in Maritime Transportation Engineering*16.15 – 16.30

A. Bahadır Şimşek, Bülent Çekiç, K. Barış Atıcı

*Use of Fuzzy MCDA for Assessment of Emergency Rallying Points*16.30 – 16.45

Coffee Break: 16.45 – 17.00

Contributed Paper Session III**17.00 – 18.15****Chair: Sinem Peker Room: İsmail**October 14, 2017

Munevvere Yıldız, Memmedaga Memmedli

*Fuzzy Local Polynomial Regression Problem and Selection of Parameter*17.00 – 17.15

Tahir Ceylan, Nihat Altınışık

*Two-Point Fuzzy Boundary Value Problems with Eigenvalue Parameter Contained in the Boundary Conditions*17.15 – 17.30

Sinem Peker, Efendi Nasibov

*A Weighted Approach for Ranking of Fuzzy Numbers*17.30 – 17.45

Enes Yavuz

*Korovkin Type Approximation of Continuous Fuzzy-Number-Valued Functions via Power Series Methods of Summability*17.45 – 18.00

Nurgül Okur, Sercan Turhan

*Hermite-Hadamard Type Inequality for Strongly Preinvex Functions via Sugeno Integrals*18.00 – 18.15

Contributed Paper Session III**17.00 – 18.15****Chair: İlhan Aydın Room: Burhan**October 14, 2017

Gül Didem Batur, Emre Çalıřkan

*Evaluation of Development Regions in Turkey in Terms of IPA Supports Using Fuzzy PROMETHEE and Fuzzy MULTIMOORA*17.00 – 17.15

İlhan Aydın

*Fuzzy Integral and Cuckoo Search Based Combined Classifier for Human Action Recognition*17.15 – 17.30

Burcu Yılmaz Kaya, Metin Dağdeviren

*An Economy Class Service Systems Analysis Based on Fuzzy Methodologies*17.30 – 17.45

Ozer Ozdemir, Asli Kaya

*Fuzzy Clustering Analysis in Gene Expression Data*17.45 – 18.00

Seda Guzel Aydin, Hasan řakir Bilge

*LabVIEW Based Fuzzy Identifier for Power Quality Disturbances*18.00 – 18.15

Contributed Paper Session III**17.00 – 18.15****Chair: Mehmet Hakan Demir Room: Türkřen**October 14, 2017

Nurdan Yıldız, Fatih Tüysüz

*Simulation Based Multi-Criteria Analysis of the Factors Used for the Evaluation of Retail Location Selection*17.00 – 17.15

Mustafa Hamurcu, Tamer Eren

*Academic Journal Selection for Academicians by Using Fuzzy Multicriteria Decision Making Methods*17.15 – 17.30

Ali Firat Inal, Ahmet Kürşad Türker, Adnan Aktepe , Süleyman Ersöz

*Robot Selection in a Computer Integrated Manufacturing Cell with Fuzzy Multi-Criteria Decision Making*17.30 – 17.45

Ebru Karakose

*A Cooperative Mission Planning of UAV Swarms Based on Fuzzy Decision Making*17.45 – 18.00

Mehmet Hakan Demir, Faruk Yiğit

*Fuzzy Logic Based Control of a Fluid Conveying Cantilever Pipe*18.00 – 18.15

Symposium Dinner: 18.30

Sunday, October 15, 2017

Invited Lecture Session

Omer Akin

09.00 – 09.45

Solving Second Order Intuitionistic Fuzzy Initial Value Problems with Heaviside Function

Coffee Break: 09.45 – 10.00

Contributed Paper Session IV

10.00 – 11.00

Chair: Zeki Ayag Room: İsmail

October 15, 2017

Mustafa Hamurcu, Tamer Eren

Evaluation of Monorail Route Alternatives by Using a Fuzzy Analytic Hierarchy Process

10.00 – 10.15

Erkan Celik, Muhammet Gul, Alev Taskin Gumus, Ali Fuat Guneri

A Review and Classification of Approaches for Dealing with TODIM and Its Applications

10.15 – 10.30

Abdussamet Subaşı, Abit Balin

An Application of Multi-Criteria Decision-Making Approach on Selection of a Honeycomb Heat Sink

10.30 – 10.45

Zeki Ayağ

A Comparison Study of F-AHP Based MCDM Methods on Green Concept Selection Problem

10.45 – 11.00

Contributed Paper Session IV

10.00 – 11.00

Chair: Omer Akin Room: Burhan

October 15, 2017

Fulya Şahin

Intuitionistic Fuzzy Topological Transformation Groups

10.00 – 10.15

Ömer Akın, Selami Bayeğ

Initial Value Problems in Intuitionistic Fuzzy Environment

10.15 – 10.30

Sanem Yavuz, Serkan Onar, Bayram Ali Ersoy, Deniz Sönmez

Intuitionistic Fuzzy 2-Absorbing Primary Ideals of Commutative Rings

10.30 – 10.45

Nurgül Okur, Sercan Turhan

Hermite-Hadamard Type Inequality for Strongly Log-convex Functions via Sugeno Integrals

10.45 – 11.00

Contributed Paper Session IV**10.00 – 11.00****Chair:** *Adil Baykasoğlu* **Room:** *Türkşen*October 15, 2017

Adil Baykasoğlu, İlker Gölcük, Fehmi Burçin Özsoydan

*Improving Fuzzy C-Means Clustering via Weighted Superposition Attraction Algorithm*10.00 – 10.15

Reyhan Shikhlinskaya, Farhad Mirzayev, Arzu Safarova, Narmin Khuliyeva

*Applying the Theory of Fuzzy Time Series in Forecasting of the Rate of USD / AZN*10.15 – 10.30

Baki Ünal

*Comparison of Different Price Formation Models in Double Auctions*10.30 – 10.45

Fatih Cavdur, Merve Kose-Kucuk

*Using Fuzzy Logic for Automobile Pricing*10.45 – 11.00

Coffee Break: 11.00 – 11.15

Contributed Paper Session V**11.15 – 12.15****Chair:** *Mahmut Turhan* **Room:** *İsmail*October 15, 2017

Turan Goktug Altundogan, Mehmet Karakose

*Fuzzy Decision Tree Based Anomaly Classification Method for X-Ray Images*11.15 – 11.30

Mehmet Karakose, Nursena Baygin, Mehmet Baygin

*Fuzzy Based Threshold Time Estimation for Shadow Transition in Reconfiguration Process of PV Arrays*11.30 – 11.45

Mahmut Turhan

*A Fuzzy Weighted Shape Based Vehicle Detection Approach for Traffic Control*11.45 – 12.00

Mahmut Turhan

*A Fuzzy Decision Tree-Based Method for Classification of Satellite Images*12.00 – 12.15

Contributed Paper Session V**11.15 – 12.15****Chair:** Sofiya Ostrovska **Room:** BurhanOctober 15, 2017

Suzan Kantarcı-Savaş, Efendi Nasibov

*A Case Study on Fuzzy Inference with Zadeh T-Operators by FID3-LR Classification Approach*11.15 – 11.30

Merve Uzuner Sahin, Kumru Didem Atalay, Berna Dengiz

*Fuzzy System Availability of a Battery Production System*11.30 – 11.45

Serkan Onar, Bayram Ali Ersoy

*Vague Soft Gamma Semigroup*11.45 – 12.00

Seda Guzel Aydin, Hasan Şakir Bilge

*A Review of EEG Signal Processing Using Fuzzy Systems*12.00 – 12.15

Contributed Paper Session V**11.15 – 12.15****Chair:** Alptekin Durmuşoğlu **Room:** TürkşenOctober 15, 2017

Tuba Adar, Elif Kilic Delice

*Evaluating Mental Work Load Using Multi-criteria Hesitant Fuzzy Linguistic Term Set (HFLTS)*11.15 – 11.30

Zeynep Didem Unutmaz Durmuşoğlu

*A Novel Learning Approach for Fuzzy Cognitive Maps: Relative Differential Hebbian Learning*11.30 – 11.45

Gülçin Canbulut, Hülya Torun

*Analysis of Fuzzy Supply Chain Performance on Buyback Contract Forms*11.45 – 12.00

Alptekin Durmuşoğlu

*A New Approach for Classification Problems: Use of Fuzzy Cognitive Maps with Binary Squeezing Functions*12.00 – 12.15

Lunch Break: 12.15 – 13.30

Invited Lecture Session

Cagdas Hakan Aladag

13.30 – 14.15*A Membership Value Based Performance Measure*

Coffee Break: 14.15 – 14.30

Contributed Paper Session VI**14.30 – 15.30****Chair: Erkan Celik Room: İsmail**October 15, 2017

Ezgi Türkarlan, Mehmet Ünver

*An Identification of a Fuzzy Measure which is Subadditive over Singletons*14.30 – 14.45

Ahmet Aktaş, Mehmet Kabak

*A Hesitant Fuzzy Approach for Ranking of European Countries in Terms of Healthcare Services*14.45 – 15.00

Gülin Feryal Can, Tuba Adar, Elif Kılıç Delice

*A Fuzzy Approach for Product Selection Considering Universal Design Principles: A Case Study for Military Gas Mask Selection*15.00 – 15.15

Merve Güler, Esin Mukul, Gülçin Büyüközkan

*Hesitant Fuzzy Linguistic VIKOR Method for e-Health Technology Selection*15.15 – 15.30

Contributed Paper Session VI**14.30 – 15.30****Chair: Salih Aytar Room: Burhan**October 15, 2017

Ebru Aydoğdu, Abdülkadir Aygünoğlu, Halis Aygün

*Fuzzifying Topology Induced by Fuzzy Metric*14.30 – 14.45

İsmail Özcan, Salih Aytar

*Fuzzy Revenue for Linear and Quadratic Demand Functions Using Trapezoidal Fuzzy Numbers*14.45 – 15.00

Fatma Karaca, Nihal Taş, Şakir Sakarya

*Life Insurances Decision Making Problem*15.00 – 15.15

Sofiya Ostrovska

*On the Note of History: Antecedents of Fuzzy Integrals in Ukrainian Mathematics*15.15 – 15.30

Contributed Paper Session VI**14.30 – 15.30****Chair:** *Baris Simsek* **Room:** *Türkşen*October 15, 2017

Hasan Yetis, Mehmet Karakose

*Optimization of Nonstationary Fuzzy Logic Systems with Genetic Algorithm for Cyber-Physical Systems*14.30 – 14.45

Barış Şimşek, Fatih Kara, Haluk Korucu, Vedat Arda Küçük, Mehmet M. Kocakerim

*Taguchi Orthogonal Arrays Based Fuzzy Modeling and Optimization of Reduced Graphene Oxide Properties*14.45 – 15.00

Gökçe Kılıçkaya

*An Application of Fuzzy Linear Programming Model with Zimmerman Method*15.00 – 15.15

Mehmet Aksaraylı, Osman Pala

*A New Fuzzy Dynamic Adaptive Particle Swarm Optimization Method for Cardinality Constrained Portfolio Optimization*15.15 – 15.30

Coffee Break: 15.30 – 15.45

Contributed Paper Session VII**15.45 – 16.45****Chair:** *Tahir Hanalioglu* **Room:** *İsmail*October 15, 2017

İlker Gölcük, Adil Baykasoğlu

*Integrating Interval Type-2 Fuzzy DEMATEL and Analytic Network Process for 3PL Transportation Provider Evaluation*15.45 – 16.00

İlker Murat Ar, Haluk Gökşen

*Technical Assessment of FTTB Supplier in Telecommunication Industry Using Fuzzy AHP-VIKOR Approach with Interval Type-2 Fuzzy Sets*16.00 – 16.15

Tahir Khaniev, M.Bahar Başkır, Farhad Mirzayev, Fikri Gökpinar

*Statistical Distribution Functions of Type-2 Fuzzy Numbers*16.15 – 16.30

Hatice Ercan Teksen, Ahmet Sermet Anagün

*Type 2 Fuzzy Control Charts Using Ranking Methods*16.30 – 16.45

Contributed Paper Session VII**15.45 – 16.45****Chair:** *Ahmet Cagdas Seckin* **Room:** *Burhan*October 15, 2017

Erdal Kılıç, Sami Şit, Ahmet Gani, Mustafa Şekkelı, Hasan Rıza Özçalık

Neuro-Fuzzy Based Model Reference Adaptive Control for Induction Motor Drive

15.45 – 16.00

Burak Gülmez, Sinem Kulluk, Hülya Torun

Training Fuzzy Neural Networks with Social Spider Algorithm

16.00 – 16.15

Aslı Akıllı, Ozkan Gorgulu

Prediction of Milk Yield Using Fuzzy Nonlinear Regression with Neural Networks

16.15 – 16.30

Fatih Bozkurt, Ahmet Çağdaş Seçkin, Aysun Coşkun

Design of Cursor Control Using EEG and IMU Sensor Fusion with ANFIS

16.30 – 16.45

Contributed Paper Session VII**15.45 – 16.45****Chair:** *Hilal Guney* **Room:** *Türkşen*October 15, 2017

Yılmaz Koçak, Gülesen Üstündağ Şiray

A Comparison of Conventional Statistical Regression Analysis and Fuzzy Regression

15.45 – 16.00

Yılmaz Koçak, İlhami İlhan

Investigation of Breaking Force of Chenille Yarn Using Statistical Regression and Fuzzy Regression Analyses

16.00 – 16.15

Hatice Ercan Teksen, Nurcan Deniz

A Fuzzy Inference Method Based on Logistic Regression for Diabetes Diagnosis

16.15 – 16.30

Asiye Ozge Dengiz, Kumru Didem Atalay, Fulya Altıparmak

Fuzzy Linear Regression Model for Estimation of Carbon Emission for Light Duty Vehicles

16.30 – 16.45

Coffee Break: 16.45 – 17.00

Contributed Paper Session VIII**17.00 – 18.00****Chair:** *Adil Baykasoglu* **Room:** *İsmail*October 15, 2017

Adil Baykasođlu, Kemal Subulan, A. Serdar Tařan, Nurhan Dudaklı,
Murat Turan, Erdin elik, zgr lker

*A Decision Support System Based on a Fuzzy-Stochastic Mathematical
Program for Intermodal Fleet Planning Problems*

17.00 – 17.15

Adil Baykasođlu, Kemal Subulan, Gizem řiker, Selin Atik

*Fuzzy Axiomatic Design Methodology for Selection of Routing Alternatives in
Intermodal Transportation*

17.15 – 17.30

Mohammad Javad Fotuhi, Zafer Bingul

Fuzzy Logic Control for Pitch and Yaw Angles of a Dual Rotor Helicopter

17.30 – 17.45

Muhammet Aydın, Ođuz Yakut

Fuzzy Logic Based Position Control of Triglidge Robot

17.45 – 18.00

Contributed Paper Session VIII**17.00 – 18.00****Chair:** *M. Bahar Baskir* **Room:** *Burhan*October 15, 2017

M.Bahar Bařkır

Extension of Full Type-2 Fuzzy Clustering Using α -Planes

17.00 – 17.15

Merve Kose-Kucuk, Fatih Cavdur

A Fuzzy Automatic New Topic Identification System: FANTIS

17.15 – 17.30

Begum Mutlu, Ebru A. Sezer, M. Ali Akcayol

A Fuzzy Approach to Determine the Quality of Automatic Summaries

17.30 – 17.45

Burcu Yılmaz Kaya, Metin Dađdeviren

A Fuzzy Marketing Strategy Benchmarking Analysis in Service Sector

17.45 – 18.00

Contributed Paper Session VIII**17.00 – 18.00****Chair:** Mehmet Karakose **Room:** TürkşenOctober 15, 2017

Ebru Karakose, Yunus Santur, Mehmet Karakose

*A Fuzzy Graph Based Approach for Delivery by Drone in Smart Cities*17.00 – 17.15

Rabia Celik, Mehmet Karakose

*A Fuzzy Analysis Approach for User Continuity in Mobile Application Lifecycle Management*17.15 – 17.30

Mehmet Karakose, Tuba Muezzinoglu, Mehmet Baygın

*Development of Vision Based Multiple Anomaly Detection Algorithm Using Fuzzy System for Moving Objects on Conveyor*17.30 – 17.45

Ayse Beyza Gokbulut, Mehmet Karakose

*A Fuzzy Based Brain-Computer Interaction Approach Using Feature Extraction for Personal Identification and Authentication*17.45 – 18.00

Coffee Break: 18.00 – 18.15

Contributed Paper Session IX**18.15 – 19.30****Chair:** Gülin Feryal Can **Room:** İsmailOctober 15, 2017

Hasan Yetis, Canan Tastimur, Taha Müezzinoğlu, Mehmet Karakose

*A Fuzzy Based Matching Algorithm for Optimized Keypoints in Image Mosaicing*18.15 – 18.30

Sabriye Topal, Emine Atasoylu

*A Risk Assessment Model Modified for Small Scale Construction Sites: A Convenient Fuzzy Approach*18.30 – 18.45

Gülin Feryal Can, Pelin Toktaş

*A Case Study on Fuzzy Risk Assessment of a Warehouse Acceptance Process Based on Risk Matrix Technique*18.45 – 19.00

Aylin Adem, Gülsüm Alıcıoğlu, Metin Dağdeviren

*Fuzzy Extension of Rapid Entire Body Assessment Method: Application of Hesitant Fuzzy REBA*19.00 – 19.15

Akif Durdu, Halil Çetin

*Motion Control of Mobile Robots Using Fuzzy Controller*19.15 – 19.30

Contributed Paper Session IX**18.15 – 19.30****Chair: Omer Akin Room: Burhan**October 15, 2017

Ömer Akin, Maksude Keleş

*Susceptible-Infected-Recovered (SIR) Epidemic Model with a Fuzzy Transmission Parameter*18.15 – 18.30

Ömer Akin, Hande Akkocaoğlu

*A Study on Fuzzy Malthusian Growth Model*18.30 – 18.45

Mehmet Karakose, Nurettin Mutlu Zorlu, Mehmet Baygın, Alişan Sarimaden, Erhan Akin

*A Machine Vision Approach Using Real Time Parallel Computing for Fuzzy Based Inspection Systems with Multiple Cameras*18.45 – 19.00

Orhan Yaman, Mehmet Karakose

*A Fuzzy Automata Based Approach for Real Time Systems*19.00 – 19.15

Yunus Santur, Sinem Güven Santur, Mehmet Karakose

*Fuzzy Logic Inference Approach for Women's Health Monitoring*19.15 – 19.30

Contributed Paper Session IX**18.15 – 19.30****Chair: Cagdas Hakan Aladag Room: Türkşen**October 15, 2017

Merve Kose-Kucuk, Fatih Cavdur

*Prediction of Parkinson's Disease Using Artificial Neural Networks*18.15 – 18.30

Hilal Guney, Cagdas Hakan Aladag

*Forecasting Seasonal Time Series with Fuzzy Time Series Based on Markov Transition Matrix*18.30 – 18.45

Bulent Alptekin, Cagdas Hakan Aladag

*Forecasting with Fuzzy Time Series Models*18.45 – 19.00

Deniz Alptekin, Bulent Alptekin, Cagdas Hakan Aladag

*Forecasting Gold Prices with Fuzzy Time Series*19.00 – 19.15

Deniz Alptekin

*Fuzzy Goodness-of-fit Tests*19.15 – 19.30
