

# **Prof. MUHAMMET ALİ AKCAYOL**

## **Personal Information**

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## **Education Information**

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Turkey 2000 - 2003

## **Dissertations**

Doctorate, Anahtarlamalı Relüktans Motorun Sinirsel Bulanık Denetimi, Gazi University, Fen Bilimleri Enstitüsü, 2002

Post Graduate, Bulanık Mantık Denetleyicili Fırçasız Doğru Akım Motoru Hız Kontrolü, Gazi University, Fen Bilimleri Enstitüsü, 1998

## **Research Areas**

Engineering and Technology

## **Academic Titles / Tasks**

Professor, Gazi University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2012 - Continues

Associate Professor, Gazi University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2006 - 2011

Lecturer, Gazi University, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, 2002 - 2003

Research Assistant, Gazi University, Fen Bilimleri Enstitüsü, 1994 - 2003

## **Professional Experience**

Head of Department, Gazi University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2012 - 2015

Vice Dean, Gazi University, Mühendislik Fakültesi, 2010 - 2013

Head of Department, Gazi University, Bilişim Enstitüsü, Bilgisayar Bilimleri Anabilim Dalı (Disiplinlerarası), 2007 - 2013

Assistant Director of the Institute, Gazi University, Bilişim Enstitüsü, 2006 - 2010

Deputy Head of Department, Gazi University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2003 - 2010

## **Advising Theses**

AKCAYOL M. A. , Software verification with Image processing technologies using deep learning algorithm, Post Graduate, E.BİLGİN(Student), 2020

AKCAYOL M. A. , Hibrit zeki sistem ile metin özetleme, Doctorate, B.MUTLU(Student), 2020

AKCAYOL M. A. , Akuş verisindeki dağılım tahminine dayalı tavsiye sistemi ve beklenmedik öneri sunumu, Doctorate,

A.UTKU(Student), 2020  
AKCAYOL M. A. , Anlamsal eşleştirme temelli otomatik meta arama motoru ve uygulaması, Doctorate,  
Y.GÖZÜDELİ(Student), 2020  
AKCAYOL M. A. , Adaptive, Context-Aware And Learning Smart Home System, Post Graduate, G.KAYA(Student), 2019  
AKCAYOL M. A. , Ağ trafiğinde anormallik tespiti için veri seti oluşturma ve test yöntemlerinin karşılaştırılması, Post Graduate, E.ERGİNAY(Student), 2019  
AKCAYOL M. A. , Anomaly Detection For Stream Data, Post Graduate, O.CAN(Student), 2019  
AKCAYOL M. A. , Improvement of realization quality of aerospace products using augmented reality technology, Post Graduate, N.BAHAR(Student), 2017  
AKCAYOL M. A. , Yazılım projeleri için yapay zeka tabanlı risk yönetimi, Doctorate, M.HANEFİ(Student), 2017  
AKCAYOL M. A. , Development Of Web Crawler And Ranking Algorithm, Doctorate, M.RASHAD(Student), 2017  
AKCAYOL M. A. , Mobil bulut ortamlarında yük dağıtımları için bağlam-duyarlı bir karar verme sistemi, Doctorate, M.TANRIVERDİ(Student), 2017  
AKCAYOL M. A. , Vehicle to vehicle ad hoc network application, Post Graduate, İ.KÖK(Student), 2015  
AKCAYOL M. A. , Bulut bilişim üzerinde restful tabanlı mobil mashup uygulaması, Post Graduate, M.DEMİRCİOĞLU(Student), 2015  
AKCAYOL M. A. , User Behaviour Based Recommendation Engine, Post Graduate, A.UTKU(Student), 2015  
AKCAYOL M. A. , Developing an adaptive context aware mobile application, Post Graduate, M.İKBAL(Student), 2014  
AKCAYOL M. A. , Development of the transport layer protocol for IPTV, Post Graduate, A.HÜSEYNLİ(Student), 2013  
AKCAYOL M. A. , Cloud computing data security, Post Graduate, A.ÖZ(Student), 2013  
AKCAYOL M. A. , Security aware routing protocol for wireless broadband mobile networks, Doctorate, M.ÜNAL(Student), 2010  
AKCAYOL M. A. , GPS AND GPRS BASED APPLICATION FOR WIDE AREA NETWORK, Post Graduate, B.DERELİOĞLU(Student), 2007  
AKCAYOL M. A. , Kablosuz ağlarda yönlendirme protokolü ve tikanıklık denetimi, Post Graduate, M.ŞİMŞEK(Student), 2006

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. Candidate sentence selection for extractive text summarization  
Mutlu B., Sezer E., Akcayol M. A.  
INFORMATION PROCESSING & MANAGEMENT, vol.57, 2020 (Journal Indexed in SCI)
- II. Deep Learning Based Prediction Model for the Next Purchase  
Utku A., Akcayol M. A.  
ADVANCES IN ELECTRICAL AND COMPUTER ENGINEERING, vol.20, pp.35-44, 2020 (Journal Indexed in SCI)
- III. A new topic modeling based approach for aspect extraction in aspect based sentiment analysis: SS-LDA  
Ozyurt B., Akcayol M. A.  
Expert Systems with Applications, 2020 (Journal Indexed in SCI Expanded)
- IV. An Experimental Research on the Use of Recurrent Neural Networks in Landslide Susceptibility Mapping  
MUTLU B., NEFESLİOĞLU H. A., SEZER E., AKCAYOL M. A., GÖKÇEÖĞLU C.  
ISPRS INTERNATIONAL JOURNAL OF GEO-INFORMATION, vol.8, no.12, 2019 (Journal Indexed in SCI)
- V. Multi-document extractive text summarization: A comparative assessment on features  
MUTLU B., SEZER E., AKCAYOL M. A.  
KNOWLEDGE-BASED SYSTEMS, vol.183, 2019 (Journal Indexed in SCI)
- VI. A weighted multi-attribute-based recommender system using extended user behavior analysis  
Akcayol M. A., Utku A., Aydogan E., Mutlu B.  
ELECTRONIC COMMERCE RESEARCH AND APPLICATIONS, vol.28, pp.86-93, 2018 (Journal Indexed in SCI)
- VII. A modified genetic algorithm for a special case of the generalized assignment problem

- Dorterler M., BAY Ö. F. , AKCAYOL M. A.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.25, no.2, pp.794-805, 2017  
(Journal Indexed in SCI)
- VIII. **A GIS-based novel active monitoring system for fiber networks**  
Akdemir O. K. , Dursun T., Arslan S., Benzer R., AKCAYOL M. A.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.24, no.1, pp.247-261, 2016  
(Journal Indexed in SCI)
- IX. **A SCALABLE ROUTING PROTOCOL FOR WIRELESS MESH NETWORKS**  
Kocaoglu R., AKCAYOL M. A.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.27, no.4, pp.891-899, 2012 (Journal Indexed in SCI)
- X. **GENE SELECTION FOR BREAST CANCER CLASSIFICATION BASED ON DATA FUSION AND GENETIC ALGORITHM**  
YILDIZ O., Tez M., BİLGE H. Ş. , AKCAYOL M. A. , GÜLER İ.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.27, no.3, pp.659-668, 2012 (Journal Indexed in SCI)
- XI. **DEVELOPMENT OF 3G BASED REMOTE CONTROLLED CAR**  
Simsek M., Yoldas M., Bulut A., DOĞRU İ. A. , AKCAYOL M. A.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.27, no.1, pp.135-142, 2012 (Journal Indexed in SCI)
- XII. **GENETIC ALGORITHM BASED A NEW ALGORITHM FOR TIME DYNAMIC SHORTEST PATH PROBLEM**  
DENER M., AKCAYOL M. A. , Toklu S., BAY Ö. F.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.26, no.4, pp.915-928, 2011 (Journal Indexed in SCI)
- XIII. **A HYBRID GENETIC ALGORITHM FOR MULTISTAGE INTEGRATED LOGISTICS NETWORK OPTIMISATION PROBLEM**  
Demirel N., Gökçen H., Akcayol M. A. , Demirel E.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.26, pp.929-936, 2011 (Journal Indexed in SCI)
- XIV. **A SIMPLE NEURO FUZZY MODEL FOR ISE 100 INDEX PREDICTION**  
OK Y., ATAK M., AKCAYOL M. A.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.26, no.4, pp.897-904, 2011 (Journal Indexed in SCI)
- XV. **Calculation of Electron Energy Distribution Functions From Electron Swarm Parameters Using Artificial Neural Network in SF<sub>6</sub> and Argon**  
Tezcan S. S. , AKCAYOL M. A. , ÖZERDEM Ö. C. , Dincer M. S.  
IEEE TRANSACTIONS ON PLASMA SCIENCE, vol.38, no.9, pp.2332-2339, 2010 (Journal Indexed in SCI)
- XVI. **CONGESTION CONTROL IN WAP TRAFFIC AND TRANSPORT LAYER PROTOCOLS**  
Toklu S., AKCAYOL M. A.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.24, no.3, pp.397-407, 2009 (Journal Indexed in SCI)
- XVII. **NEFCLASS based extraction of fuzzy rules and classification of risks of low back disorders**  
AKAY D., AKCAYOL M. A. , KURT M.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.35, no.4, pp.2107-2112, 2008 (Journal Indexed in SCI)
- XVIII. **A HEURISTIC ROUTING PROTOCOL AND CONGESTION CONTROL AT WIRELESS NETWORKS**  
Simsek M., AKCAYOL M. A.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.23, no.1, pp.57-63, 2008 (Journal Indexed in SCI)
- XIX. **Fuzzy pi controller for speed control of switched reluctance motor Bulanik pi denetleyici ile bir anahtarlamali relüktans motorun hız denetimi**  
Elmas Ç., AKCAYOL M. A. , Yiğit T.

- Journal of the Faculty of Engineering and Architecture of Gazi University, vol.22, no.1, pp.64-72, 2007 (Journal Indexed in SCI Expanded)
- XX. **Neuro-fuzzy controller implementation for an adaptive cathodic protection on Iraq-Turkey crude oil pipeline**  
Akcayol M. A., Sagiroglu S.  
APPLIED ARTIFICIAL INTELLIGENCE, vol.21, no.3, pp.241-256, 2007 (Journal Indexed in SCI)
- XXI. **Implementation of real-time optimization of page layout of internet newspaper using simulated annealing** İnternet gazetesi sayfa düzeninin gerçek zamanlı eniyilemesinin benzetilmiş tavlama algoritmasıyla gerçekleştirilmesi  
Canbek G., AKCAYOL M. A.  
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.21, no.2, pp.341-348, 2006 (Journal Indexed in SCI Expanded)
- XXII. **Application of fuzzy logic controlled cathodic protection on Iraq-Turkey crude oil pipeline**  
Akcayol M. A.  
APPLIED INTELLIGENCE, vol.24, no.1, pp.43-50, 2006 (Journal Indexed in SCI)
- XXIII. **Forecasting net energy consumption using artificial neural network**  
Soezen A., Akcayol M. A., ARCAKLIÖĞLU E.  
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, vol.1, no.2, pp.147-155, 2006 (Journal Indexed in SCI)
- XXIV. **PICTool: Integrated hardware and software for teaching/learning FLC using microcontrollers**  
ERDEM O. A., Akcayol M. A., Orman A.  
INTELLIGENT AUTOMATION AND SOFT COMPUTING, vol.12, no.4, pp.411-417, 2006 (Journal Indexed in SCI)
- XXV. **Artificial neural network based modeling of heated catalytic converter performance**  
Akcayol M. A., Cinar C.  
APPLIED THERMAL ENGINEERING, vol.25, pp.2341-2350, 2005 (Journal Indexed in SCI)
- XXVI. **Reformulation, as a function of only working temperatures, of performance parameters of a solar driven ejector-absorption cycle using artificial neural networks**  
SÖZEN A., Akcayol M. A.  
ENERGY SOURCES, vol.27, no.12, pp.1133-1149, 2005 (Journal Indexed in SCI)
- XXVII. **NEFCLASS-based neuro fuzzy controller for SRM drive**  
Akcayol M. A., Elmas C.  
ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE, vol.18, no.5, pp.595-602, 2005 (Journal Indexed in SCI)
- XXVIII. **A computer-based educational tool for pulse width modulator for static converters**  
Akcayol M. A., Yigit T.  
COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, vol.12, no.4, pp.215-223, 2005 (Journal Indexed in SCI)
- XXIX. **Temperature prediction in a coal fired boiler with a fixed bed by fuzzy logic based on numerical solution**  
Biyikoglu A., Akcayol M. A., ÖZDEMİR V., Sivrioglu M.  
ENERGY CONVERSION AND MANAGEMENT, vol.46, no.1, pp.151-166, 2005 (Journal Indexed in SCI)
- XXX. **Modelling (using artificial neural-networks) the performance parameters of a solar-driven ejector-absorption cycle**  
SÖZEN A., Akcayol M. A.  
APPLIED ENERGY, vol.79, no.3, pp.309-325, 2004 (Journal Indexed in SCI)
- XXXI. **Performance prediction of a vapour-compression heat-pump**  
SÖZEN A., ARCAKLIÖĞLU E., Erisen A., Akcayol M. A.  
APPLIED ENERGY, vol.79, no.3, pp.327-344, 2004 (Journal Indexed in SCI)
- XXXII. **An educational tool for fuzzy logic controller and classical controllers**  
Akcayol M. A., Elmas C., ERDEM O. A., Kurt M.  
COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, vol.12, no.2, pp.126-135, 2004 (Journal Indexed in SCI)
- XXXIII. **Application of adaptive neuro-fuzzy controller for SRM**

- Akcayol M. A.  
 ADVANCES IN ENGINEERING SOFTWARE, vol.35, pp.129-137, 2004 (Journal Indexed in SCI)
- XXXIV. **Performance prediction of a solar driven ejector-absorption cycle using fuzzy logic**  
 SÖZEN A., Kurt M., Akcayol M. A. , Ozalp M.  
 RENEWABLE ENERGY, vol.29, no.1, pp.53-71, 2004 (Journal Indexed in SCI)
- XXXV. **Virtual electrical machinery laboratory: A fuzzy logic controller for induction motor drives**  
 Elmas C., Akcayol M. A.  
 INTERNATIONAL JOURNAL OF ENGINEERING EDUCATION, vol.20, no.2, pp.226-233, 2004 (Journal Indexed in SCI)
- XXXVI. **PC based educational tool for a switched reluctance drive with fuzzy logic**  
 Elmas C., Akcayol M. A.  
 INTERNATIONAL JOURNAL OF ELECTRICAL ENGINEERING EDUCATION, vol.40, no.3, pp.208-219, 2003 (Journal Indexed in SCI)
- XXXVII. **An educational tool for fuzzy logic-controlled BDCM**  
 Akcayol M. A. , ÇETİN A., Elmas C.  
 IEEE TRANSACTIONS ON EDUCATION, vol.45, no.1, pp.33-42, 2002 (Journal Indexed in SCI)

## Articles Published in Other Journals

- I. **A Model for Prediction of Customer Behavior: A Case Study for Banking Sector**  
 Özdem K., Akcayol M. A.  
 Niğde Üniversitesi Mühendislik Bilimleri Dergisi, vol.10, no.1, pp.1-8, 2021 (National Refreed University Journal)
- II. **Deep Learning based, a New Model for Video Captioning**  
 Ozer E. G. , Karapinar I. N. , Busbug S., Turan S., Utku A., AKCAYOL M. A.  
 INTERNATIONAL JOURNAL OF ADVANCED COMPUTER SCIENCE AND APPLICATIONS, vol.11, no.3, pp.514-519, 2020 (Journal Indexed in ESCI)
- III. **Design and implementation of web based risk management system based on artificial neural networks for software projects: WEBRISKIT**  
 CALP M. H. , AKCAYOL M. A.  
 PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGİSİ, vol.26, no.5, pp.993-1014, 2020 (Journal Indexed in ESCI)
- IV. **A comprehensive study on stream data characterization, generation and analytics**  
 UTKU A., AKCAYOL M. A.  
 Erzincan University Journal of Science and Technology, vol.12, no.1, pp.379-410, 2019 (Refereed Journals of Other Institutions)
- V. **Genetic Algorithm and Fuzzy Logic Based FlexibleQuerying in Databases**  
 ŞENOL A., KARACAN H., AKCAYOL M. A.  
 JOURNAL OF COMPUTERS, vol.13, no.6, pp.678-691, 2018 (Refereed Journals of Other Institutions)
- VI. **A Survey On Sentiment Analysis And Opinion Mining, Methods And Approaches**  
 ÖZYURT B., AKCAYOL M. A.  
 Selcuk University, Journal of Engineering Science and Technology, vol.6, no.4, pp.668-693, 2018 (Refereed Journals of Other Institutions)
- VII. **Optimization of Project Scheduling Activities in Dynamic CPM and PERT Networks Using Genetic Algorithms**  
 CALP M. H. , AKCAYOL M. A.  
 Süleyman Demirel University, Journal of Natural and Applied Sciences, vol.22, no.2, pp.615-627, 2018 (Refereed Journals of Other Institutions)
- VIII. **Development of Reserved Reliable Flow Control Algorithm in Mobile Ad Hoc Networks**  
 DOĞRU İ. A. , ERDEM O. A. , AKCAYOL M. A.  
 Gazi Journal of Engineering Sciences, vol.4, no.3, pp.144-156, 2018 (Refereed Journals of Other Institutions)
- IX. **A New Context-Sensitive Decision Making System For Mobile Cloud Offloading**

- TANRIVERDİ M., AKCAYOL M. A.  
International Journal of Computer Science Information Technology, vol.10, no.3, pp.71-90, 2018 (Refereed Journals of Other Institutions)
- X. **A comprehensive review on the use of big data in recommendation systems**  
UTKU A., AKCAYOL M. A.  
International Journal of Advances in Engineering and Pure Sciences, vol.30, no.4, pp.339-357, 2018 (Refereed Journals of Other Institutions)
- XI. **An Efficient Multi-Threaded Web Crawler Using HashMaps**  
KANSU Y., MUTLU B., UTKU A., AKCAYOL M. A.  
Journal of Advances in Computer Networks (JACN), vol.5, no.2, pp.65-69, 2017 (Refereed Journals of Other Institutions)
- XII. **A New Packet Scheduling Algorithm for Real-Time Multimedia Streaming**  
ŞİMŞEK M., DOĞAN N., AKCAYOL M. A.  
Network Protocols and Algorithms, vol.9, 2017 (Refereed Journals of Other Institutions)
- XIII. **Crime Analysis Based on Association Rules Using Apriori Algorithm**  
SEVRİ M., KARACAN H., AKCAYOL M. A.  
International Journal of Information and Electronics Engineering, vol.7, no.3, pp.99-102, 2017 (Refereed Journals of Other Institutions)
- XIV. **Öğrenebilen ve Adaptif Tavsiye Sistemleri İçin Karşılaştırmalı ve Kapsamlı Bir İnceleme**  
UTKU A., AKCAYOL M. A.  
Erciyes Üniversitesi Fen Bilimleri Dergisi, vol.33, no.3, 2017 (Other Refereed National Journals)
- XV. **Analyzing the Route Cache Timeout Parameter of DSR Protocol in Mobile Ad Hoc Networks**  
ÖZYURT B., DOĞRU İ. A., AKCAYOL M. A.  
International Journal of Computer and Communication Engineering (IJCCE), vol.6, no.1, pp.40-48, 2017 (Refereed Journals of Other Institutions)
- XVI. **Implementation of a New Recommendation System Based on Decision Tree Using Implicit Relevance Feedback**  
UTKU A., KARACAN H., YILDIZ O., AKCAYOL M. A.  
Journal of Software, vol.10, no.12, pp.1367-1374, 2015 (Refereed Journals of Other Institutions)
- XVII. **Context Aware Decision Making System for Mobile Cloud Offloading**  
TANRIVERDİ M., AKCAYOL M. A.  
International Journal of Computer Networks & Communications, vol.7, no.6, pp.69-85, 2015 (Refereed Journals of Other Institutions)
- XVIII. **The importance of human computer interaction in the development process of software projects**  
CALP M. H., AKCAYOL M. A.  
Global Journal of Information Technology, pp.48-54, 2015 (Refereed Journals of Other Institutions)
- XIX. **Teknokentlerde Geliştirilen Yazılım Projelerinin Risk Analizi ve Başarı Düzeyleri**  
CALP M. H., AKCAYOL M. A.  
Düzce Üniversitesi Bilim ve Teknoloji Dergisi, vol.3, no.1, pp.57-75, 2015 (Other Refereed National Journals)
- XX. **Yazılım Projelerinde Karşılaşılan Risk Faktörleri ve Risk Yönetim Süreci**  
CALP M. H., AKCAYOL M. A.  
MARMARA UNIVERSITY JOURNAL OF SCIENCE, vol.27, no.1, pp.1, 2015 (Other Refereed National Journals)
- XXI. **Performance analysis and solutions for wireless mesh networks**  
KOCAOĞLU R., AKCAYOL M. A.  
Journal of Informatics Technologies, vol.4, no.3, pp.1-12, 2011 (Other Refereed National Journals)
- XXII. **A Survey of Multicast Routing Protocols in Ad Hoc Networks**  
BAKER M. R., AKCAYOL M. A.  
Gazi University Journal of Science, vol.24, no.3, pp.451-462, 2011 (Refereed Journals of Other Institutions)
- XXIII. **Prediction based handover algorithms in wireless networks**  
ATEŞ V., AKCAYOL M. A.  
Journal of Informatics Technologies, vol.3, no.3, pp.27-36, 2010 (Other Refereed National Journals)

- XXIV. **Application of GSM based smart home**  
İNAL K., AKCAYOL M. A.  
Journal of Informatics Technologies, vol.2, no.2, pp.37-43, 2009 (Other Refereed National Journals)
- XXV. **Hareketli Ad-Hoc Ağlarda Bir Hareketlilik Yönetimi Protokolü**  
DOĞRU İ. A., ŞİMŞEK M., AKCAYOL M. A.  
Politeknik Dergisi, vol.11, no.4, pp.313-38, 2008 (Other Refereed National Journals)
- XXVI. **Secure routing protocols in wireless networks**  
ÜNAL M., AKCAYOL M. A.  
Journal of Informatics Technologies, vol.1, no.3, pp.7-13, 2008 (Other Refereed National Journals)
- XXVII. **XML database query optimization using simulated annealing**  
GÖZÜDELİ Y., AKCAYOL M. A.  
Journal of Informatics Technologies, vol.1, no.1, pp.13-22, 2008 (Other Refereed National Journals)
- XXVIII. **Internet tabanlı uzaktan güvenlik sistemi tasarımı ve uygulaması**  
ERDEM O. A., AKCAYOL M. A., Haydar T.  
eJournal of New World Sciences Academy, vol.2, no.2, pp.78-86, 2007 (Refereed Journals of Other Institutions)
- XXIX. **Internet based remote security system design and implementation**  
ERDEM O. A., AKCAYOL M. A., TUNA H.  
e-Journal of New World Sciences Academy Natural and Applied Sciences, vol.2, no.2, pp.78-86, 2007 (Refereed Journals of Other Institutions)
- XXX. **Fuzzy PI controller for speed control of switched reluctance motor**  
ELMAS Ç., AKCAYOL M. A., YİĞİT T.  
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.22, no.1, pp.65-72, 2007 (Refereed Journals of Other Institutions)
- XXXI. **Present condition analysis and suggestions for e signature applications in the Turkey**  
EROL H., AKCAYOL M. A.  
The Journal of Turkish Law World, vol.3, pp.157-174, 2007 (Other Refereed National Journals)
- XXXII. **REAL TIME OPTIMIZATION OF WEB PAGE LAYOUT USING GENETIC ALGORITHM**  
GÖZÜDELİ Y., AKCAYOL M. A.  
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.22, no.2, pp.431-439, 2007 (Refereed Journals of Other Institutions)
- XXXIII. **İnternet Gazetesi Sayfa Düzeninin Gerçek Zamanlı Optimizasyonun Tavlama Benzetimi Algoritmasıyla Gerçekleştirilmesi**  
CANBEK G., AKCAYOL M. A.  
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.21, no.2, pp.341-348, 2006 (Refereed Journals of Other Institutions)
- XXXIV. **A software development for smart card applications for use in health system**  
AKCAYOL M. A., ELMAS Ç.  
S.D.U. Journal of Science, vol.9, no.2, pp.120-125, 2005 (Other Refereed National Journals)
- XXXV. **Artificial neural network based modeling of injection pressure in diesel engines**  
AKCAYOL M. A., ÇINAR C., BÜLBÜL H. İ., KILIÇARSLAN A.  
WSEAS Transactions on Computers, vol.5, no.3, pp.1538-1544, 2004 (Refereed Journals of Other Institutions)
- XXXVI. **NEFCLASS based estimator for inductance variation of SRM**  
AKCAYOL M. A.  
Erciyes University Journal of the Institute of Science and Technology, vol.20, pp.28-36, 2004 (Other Refereed National Journals)
- XXXVII. **Fuzzy logic controlled cathodic protection circuit design**  
AKCAYOL M. A.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.17, no.1, pp.111-127, 2004 (Refereed Journals of Other Institutions)
- XXXVIII. **Computer controlled trafo redresor unit design and application**  
AKCAYOL M. A.  
Gazi University Journal of Scienc, vol.16, no.3, pp.493-502, 2003 (Other Refereed National Journals)

- XXXIX. **Fuzzy logic based speed control of brushless DC motor**  
 ELMAS Ç., AKCAYOL M. A.  
 Gazi University Journal of Polytechnic, vol.3, no.3, pp.7-14, 2000 (Other Refereed National Journals)
- XL. **Bilgisayarlarda veri sıkıştırma ile elde edilecek kazanımlar**  
 ERDEM O. A. , AKCAYOL M. A. , AYDIN E.  
 Gazi Üniversitesi Fen Bilimleri Enstitüsü, vol.8, no.1, pp.46-55, 1995 (Refereed Journals of Other Institutions)
- XLI. **Benefits of data compressing in computers**  
 ERDEM O. A. , AKCAYOL M. A. , AYDIN E.  
 Gazi University Journal of Science, vol.8, no.1, pp.46-55, 1995 (Other Refereed National Journals)

## Books & Book Chapters

- I. **İlişkiler**  
 ÖZBAYOĞLU A. M. , AKIN Ö., DOĞAN N., AKCAYOL M. A. , ASKERZADE İ., AYDIN K., AYDIN Y., BOLAT Y., BİÇAKCI K., DEMİR H., et al.  
 in: Ayrik Matematik ve Uygulamaları, Ömer Akin, Murat Özbayoğlu, Editor, Palme Yayıncılık, Ankara, pp.573-640, 2015
- II. **Web Teknolojileri FrontPage Dreamweaver HTML JavaScript ASP PHP**  
 ERDEM O. A. , AKCAYOL M. A.  
 Seçkin Kitapevi, Ankara, 2005

## Refereed Congress / Symposium Publications in Proceedings

- I. **Anomaly detection in the stream data by using nearest neighbor regression and linear regression analysis**  
 ACAR O. C. , AKCAYOL M. A.  
 International Conference on Artificial Intelligence and Applied Mathematics in Engineering, 20 - 22 May 2019
- II. **A Novel Model for Risk Estimation in Software Projects Using Artificial Neural Network**  
 CALP M. H. , AKCAYOL M. A.  
 International Conference on Artificial Intelligence and Applied Mathematics in Engineering, 20 - 22 May 2019
- III. **Deep Learning Based an Application for Anomaly Detection at Institutional Network**  
 Erginay E., AKCAYOL M. A.  
 International Data Science and Engineering Symposium, 2 - 03 May 2019
- IV. **Smart Home System Using Sequential Pattern Mining**  
 KAYA G., BECERGEN YETKİN B., AKCAYOL M. A.  
 International Conference on Technology, Engineering and Science, 26 - 29 October 2018
- V. **Design Of An Expert System Supported Portable Cardiotocograph (CTG)**  
 ŞİMŞEK M., DOĞRU İ. A. , AKCAYOL M. A.  
 IADIS International Conference e-Health 2011, rome, 20 - 26 July 2011
- VI. **Deep Learning Approach for Author Verification Problem on Twitter**  
 Yilmaz M., MUTLU B., Utku A., AKCAYOL M. A.  
 26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- VII. **End-to-End Hierarchical Fuzzy Inference Solution**  
 MUTLU B., SEZER E., AKCAYOL M. A.  
 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE), Rio de Janeiro, Brazil, 8 - 13 July 2018
- VIII. **Automatic Rule Generation of Fuzzy Systems: A Comparative Assessment on Software Defect Prediction**  
 MUTLU B., SEZER E., AKCAYOL M. A.  
 3rd International Conference on Computer Science and Engineering (UBMK), Sarajevo, Bosnia And Herzegovina,

- 20 - 23 September 2018, pp.209-214
- IX. **Permission Based Android Malware Detection With Multilayer Perceptron**  
Utku A., Muhendisligi B., AKCAYOL M. A.  
26th IEEE Signal Processing and Communications Applications Conference (SIU), Izmir, Turkey, 2 - 05 May 2018
- X. **Decision Tree Based Android Malware Detection System**  
Utku A., DOĞRU İ. A., AKCAYOL M. A.  
26th IEEE Signal Processing and Communications Applications Conference (SIU), Izmir, Turkey, 2 - 05 May 2018
- XI. **Specification Based Automatic Product Categorization From Unstructured Data**  
Huseynli A., YILDIZ O., AKCAYOL M. A.  
26th IEEE Signal Processing and Communications Applications Conference (SIU), Izmir, Turkey, 2 - 05 May 2018
- XII. **A New Recommender System Based on Multiple Parameters and Extended User Behavior Analysis**  
UTKU A., AYDOĞAN DUMAN E., MUTLU B., AKCAYOL M. A.  
Proceedings of the 9th International Conference on Information Management and Engineering - ICIME 2017,  
Barcelona, Spain, Spain, 9 - 11 October 2017
- XIII. **A Fuzzy Approach to Determine the Quality of Automatic Summaries**  
MUTLU B., SEZER E., AKCAYOL M. A.  
The 5th International Fuzzy Systems Symposium 2017, 14 - 15 October 2017
- XIV. **Assembly Inspection in Aircraft Manufacturing Using Augmented Reality Technology**  
GÜDEKLİ N., AKCAYOL M. A.  
3rd International Conference on Computer and Information Technology 2017, 12 - 14 April 2017
- XV. **Priority Queue Based Estimation of Importance of Web Pages for Web Crawlers**  
BAKER M. R., AKCAYOL M. A.  
3rd International Conference on Computer and Information Technology 2017, 12 - 14 April 2017
- XVI. **An Efficient Multi-Threaded Web Crawler Using HashMaps**  
KANSU Y., MUTLU B., UTKU A., AKCAYOL M. A.  
4th International Conference on Electrical and Electronics Engineering 2017, 8 - 10 April 2017
- XVII. **Genetic Algorithm and Fuzzy Logic Based Flexible Querying in Databases**  
ŞENOL A., KARACAN H., AKCAYOL M. A.  
4th International Conference on Electrical and Electronics Engineering 2017, 8 - 10 April 2017
- XVIII. **Crime Analysis Based on Association Rules Using Apriori Algorithm**  
SEVRİ M., KARACAN H., AKCAYOL M. A.  
4th International Conference on Electrical and Electronics Engineering 2017, 8 - 10 April 2017
- XIX. **A Comprehensive Analysis of Architectures and Methods of Real-Time Big Data Analytics**  
AY S., AKCAYOL M. A.  
4th International Conference on Electrical and Electronics Engineering 2017, 8 - 10 April 2017
- XX. **Improvement of Realization Quality of Aerospace Products Using Augmented Reality Technology**  
BAHAR N., AKCAYOL M. A.  
18th International Conference on Virtual and Augmented Reality (ICVAR2016), 7 - 08 January 2016, vol.10, pp.18-21
- XXI. **A Comprehensive Survey for Sentiment Analysis Tasks Using Machine Learning Techniques**  
Aydogan E., AKCAYOL M. A.  
International Symposium on Innovations in Intelligent Systems and Applications (INISTA), Sinaia, Romania, 2 - 05 August 2016
- XXII. **Implementation of a New Recommendation System Based On Decision Tree Using Implicit Relevance Feedback**  
UTKU A., KARACAN H., YILDIZ O., AKCAYOL M. A.  
7th International Conference on Software Technology and Engineering (ICSTE 2015), 19 - 20 September 2015
- XXIII. **The Importance of Human Computer Interaction in the Development Process of Software Projects**  
CALP M. H., AKCAYOL M. A.  
5th WORLD CONFERENCE on INNOVATION and COMPUTER SCIENCES - INSOODE-2015, 14 - 16 May 2015
- XXIV. **A New Method Based on Tree Simplification and Schema Matching for Automatic Web Result**

**Extraction and Matching**

Yaşar G., KARACAN H., YILDIZ O., Mohammed B., Ali M., Kalender M., Özcan Ö., AKCAYOL M. A.

International MultiConference of Engineers and Computer Scientists, Hong Kong, 18 - 20 March 2015

- XXV. **Extraction of Automatic Search Result Records Using Content Density Algorithm Based on Node Similarity**

Yaşar G., YILDIZ O., KARACAN H., Mohammed B., Ali M., Kalender M., Özcan Ö., AKCAYOL M. A.

The International Conference on Data Mining, Internet Computing, and Big Data (BigData2014), 17 - 19 November 2014

- XXVI. **Gene selection for breast cancer**

YILDIZ O., Tez M., BİLGE H. Ş. , AKCAYOL M. A. , GÜLER N. F.

2012 20th Signal Processing and Communications Applications Conference (SIU), Mugla, Turkey, Turkey, 18 - 20 April 2012, pp.1-4

- XXVII. **A comprehensive analysis of e-learning studies in Turkey, problems and suggestions**

DOĞRU İ. A. , Simsek M., AKCAYOL M. A.

IADIS International Conference e-Learning 2011, Part of the IADIS Multi Conference on Computer Science and Information Systems 2011, MCCSIS 2011, Rome, Italy, 20 - 23 July 2011, vol.2, pp.401-404

- XXVIII. **A Comprehensive Analysis of E-Learning Studies in Turkey**

DOĞRU İ. A. , ŞİMŞEK M., AKCAYOL M. A.

Proceedings of the IADIS International Conference e-Learning 2011, roma, 20 - 06 July 2011

- XXIX. **İki Makineli Robotik Hücrelerde Çoklu Parça Tipi Çizelgemesi İçin Bir Tavlama Benzetimi Algoritması**

BATUR G. D. , EROL S., AKCAYOL M. A.

11. Üretim Araştırmaları Sempozyumu (ÜAS), İstanbul, Turkey, 23 - 24 June 2011

- XXX. **A Comprehensive Analysis of E-Government Studies in Turkey, Problems and Suggestions**

ŞİMŞEK M., TOKLU S., AKCAYOL M. A. , SONCUL H., ERGÜN M. A.

The IADIS WWW/Internet 2009 Conference, 19 - 22 November 2009

- XXXI. **A comprehensive analysis of e government studies in Turkey problems and suggestions**

ŞİMŞEK M., TOKLU S., AKCAYOL M. A. , SONCUL H., ERGÜN M. A.

The IADIS WWW/Internet 2009 Conference, 19 - 22 November 2009, pp.175-179

- XXXII. **A Priority Based Protocol And Load Balancing For Queue Management On Wireless Networks**

TOKLU S., ŞİMŞEK M., YILDIZ O., BAY İ., ŞİMŞEK A., AKCAYOL M. A.

The 2008 International Conference on Wireless Networks (ICWN'08), Las Vegas, United States Of America, 14 - 17 July 2008, pp.341-344

- XXXIII. **Rule-Based Mobility Management Routing for Mobile Ad Hoc Networks**

DOĞRU İ. A. , ŞİMŞEK M., TOKLU S., YILDIZ O., AKCAYOL M. A.

WORLDCOMP'08 – The 2008 International Conference on Wireless Networks (ICWN'08), Las Vegas Nevada, United States Of America, 14 - 17 July 2008

- XXXIV. **Rule-Based Mobility Management Routing for Mobile Ad Hoc Networks**

DOĞRU İ. A. , ŞİMŞEK M., TOKLU S., YILDIZ O., AKCAYOL M. A.

The 2008 International Conference on Wireless Networks (ICWN'08), Las Vegas, United States Of America, 14 - 17 July 2008, pp.175-179

- XXXV. **A priority based protocol and load balancing for queue management on wireless networks**

TOKLU S., ŞİMŞEK M., YILDIZ O., BAY İ., ŞİMŞEK A., AKCAYOL M. A.

The 2008 International Conference on Wireless Networks (ICWN'08), 14 - 17 July 2008, pp.341-344

- XXXVI. **Adaptive cathodic protection for crude oil pipeline**

AKCAYOL M. A. , TAPLAMACIOĞLU M. C.

Electronics, Computers and Artificial Intelligence-ECAI-2007, 29 - 30 June 2007

- XXXVII. **Determination of the response of Ar+SF<sub>6</sub> to crossed electric and magnetic fields using an artificial neural network**

AKCAYOL M. A. , Hiziroglu H. R. , Dincer M. S.

Annual Conference on Electrical Insulation and Dielectric Phenomena, Vancouver, Canada, 14 - 17 October 2007, pp.695-697

- XXXVIII. **Present condition analysis and suggestions for e signature applications in the Turkey**  
 EROL H., AKCAYOL M. A.  
 1st National Electronic Signature Symposium, Turkey, 7 - 08 December 2006
- XXXIX. **E signature in institutional networks and a sample application for Gazi University**  
 EROL H., AKCAYOL M. A.  
 1st National Electronic Signature Symposium, Turkey, 7 - 08 December 2006
- XL. **Genetic Algorithm Based Location Optimization of Emergency Service Units**  
 AKCAYOL M. A. , ŞİMŞEK M., Bay İ., TOKLU S., DOĞRU İ. A.  
 4th FAE International Symposium, Lefke, Cyprus, 2006., Lefke, Cyprus (Kktc), 30 November - 01 December 2006
- XLI. **Genetic Algorithm Based Location Optimization of Emergency Service Units**  
 AKCAYOL M. A. , ŞİMŞEK M., BAY İ., TOKLU S., DOĞRU İ. A.  
 4th FAE International Symposium, European University of Lefke, 1 - 03 January 2006
- XLII. **E library studies in Turkey analysis and proposals**  
 AKCAYOL M. A. , ŞİMŞEK M., BAY İ.  
 Academic Informatics 2005, Turkey, 2 - 04 February 2005
- XLIII. **E government studies in Turkey problems and solutions**  
 AKCAYOL M. A.  
 Informatics Association of Turkey 21. National Informatics Symposium, Turkey, 4 - 06 October 2004, pp.274-290
- XLIV. **Artificial neural network based modeling of stirling engine**  
 ÇINAR C., AKCAYOL M. A.  
 ICCI2004-International Conference on Computational Intelligence, 27 - 29 May 2004
- XLV. **Genetic PI controller for a permanent magnet synchronous motor drive**  
 ELMAS Ç., AKCAYOL M. A.  
 International XII.Turkish Symposium on Artificial Intelligence and Neural Networks-TAINN-2003, 2 - 04 July 2003
- XLVI. **SCADA based trafo redresor unit design and application**  
 İŞIK H., AKCAYOL M. A.  
 VIII. International Corrosion Symposium, 16 - 17 June 2002, pp.343-352

## Supported Projects

- AKCAYOL M. A. , Project Supported by Higher Education Institutions, GMS/GPRS Tabanlı Kablosuz Ağ İle Türkiye Genelini Kapsayacak Sağlık Bilgi Ağı Geliştirilmesi, 2005 - Continues
- AKCAYOL M. A. , Project Supported by Higher Education Institutions, Yapay Zeka İle Sorgu İyileştirmeli Açık Kaynak Doğal XML Veri Tabanı Sunucu Yazılımı, 2005 - Continues
- AKCAYOL M. A. , Project Supported by Higher Education Institutions, GBM Tabanlı SCADA sistem tasarımı ve uygulaması, 2003 - Continues
- AKCAYOL M. A. , Project Supported by Higher Education Institutions, KABLOSUZ AĞLARDA ÇOKLU GÖNDERİM PROTOKOLÜ GELİŞTİRİLMESİ, 2010 - 2013
- AKCAYOL M. A. , Project Supported by Higher Education Institutions, 3G TABANLI ADAPTİF VE ENERJİ ETKİN AKILLI EV UYGULAMASI, 2010 - 2012
- AKCAYOL M. A. , Project Supported by Higher Education Institutions, Genişbant Kablosuz Mobil Ağlarda Güvenlik Bilinçli Zeki Yönlendirme Protokolü Geliştirilmesi, 2009 - 2011

## Citations

Total Citations (WOS):415

h-index (WOS):10