

Assoc. Prof. ÇAĞDAŞ HAKAN ALADAĞ

Personal Information

Email: aladag@hacettepe.edu.tr

Web: <http://yunus.hacettepe.edu.tr/~aladag/>

International Researcher IDs

ORCID: 0000-0002-3953-7601

Publons / Web Of Science ResearcherID: D-2140-2010

ScopusID: 23092915500

Yoksis Researcher ID: 170445

Education Information

Post Doctorate, University of Toronto, Faculty Of Science, Department Of Mechanical And Industrial Engineering, Canada
2014 - Continues

Doctorate, Hacettepe University, Fen Fakültesi, İstatistik, Turkey 2004 - 2009

Postgraduate, Hacettepe University, Fen Fakültesi, İstatistik, Turkey 2001 - 2004

Undergraduate, Hacettepe University, Fen Fakültesi, İstatistik, Turkey 1997 - 2001

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Yapay sinir ağlarının mimari seçimi için tabu arama algoritması, Hacettepe Üniversitesi, Fen Bilimleri
Enstitüsü, İstatistik (Dr), 2009

Postgraduate, Tabu arama algoritması ile bir ders zaman çizelgeleme probleminin çözümü, Hacettepe Üniversitesi, Fen
Bilimleri Enstitüsü, İstatistik (YI) (Tezli), 2004

Research Areas

Computer Sciences, algorithms, Artificial Intelligence, Computer Learning and Pattern Recognition, Neural Networks,
Industrial Engineering , Optimization Theory and Methods, Global Optimization, Heuristic Methods, Integer and Mixed
Integer Programming, Statistics, Statistical Analysis and Applications, Natural Sciences, Engineering and Technology

Academic Titles / Tasks

Professor, Hacettepe University, Fen Fakültesi, İstatistik Bölümü, 2020 - Continues

Associate Professor, Hacettepe University, Fen Fakültesi, İstatistik Bölümü, 2013 - 2020

Lecturer PhD, Hacettepe University, Fen Fakültesi, İstatistik Bölümü, 2009 - 2013

Academic and Administrative Experience

Vice Dean, Hacettepe University, Fen Fakültesi, İstatistik Bölümü, 2021 - Continues

Courses

Bilgisayar Programlamaya Giriş, Undergraduate, 2021 - 2022
Zeki Optimizasyon Yöntemleri, Undergraduate, 2020 - 2021
Veri Bilimi, Undergraduate, 2020 - 2021
Tamsayılı Programlama, Postgraduate, 2020 - 2021
Esnek Hesaplama Yöntemleri, Postgraduate, 2020 - 2021
Makine Öğrenmesine Giriş, Postgraduate, 2020 - 2021
Yöneylem Araştırmasına Giriş, Undergraduate, 2020 - 2021

Advising Theses

ALADAĞ Ç. H., Markov geçiş matrisine dayalı mevsimsel bulanık zaman serisi, Doctorate, H.GÜNEY(Student), 2016
ALADAĞ Ç. H., Portföy optimizasyonunda değiştirilmiş parçacık sürü optimizasyonu yaklaşımı, Postgraduate, İYAMAN(Student), 2014

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Statistical determination of significant particle swarm optimization parameters: the case of Weibull distribution**
Alptekin B., Acitas S., ŞENOĞLU B., ALADAĞ Ç. H.
SOFT COMPUTING, vol.26, no.22, pp.12623-12634, 2022 (SCI-Expanded)
- II. **A new approach for estimating the parameters of Weibull distribution via particle swarm optimization: An application to the strengths of glass fibre Cheek tor data**
ACITAŞ Ş., ALADAĞ Ç. H., ŞENOĞLU B.
RELIABILITY ENGINEERING & SYSTEM SAFETY, vol.183, pp.116-127, 2019 (SCI-Expanded)
- III. **Fuzzy logic-based bidding strategies in dynamic double auctions**
Unal B., ALADAĞ Ç. H.
KYBERNETES, vol.48, no.3, pp.612-635, 2019 (SCI-Expanded)
- IV. **A Novel Stochastic Seasonal Fuzzy Time Series Forecasting Model**
GÜNEY H., BAKIR M. A., ALADAĞ Ç. H.
INTERNATIONAL JOURNAL OF FUZZY SYSTEMS, vol.20, no.3, pp.729-740, 2018 (SCI-Expanded)
- V. **High order fuzzy time series forecasting method based on an intersection operation**
Yolcu O. C., YOLCU U., EĞRİOĞLU E., ALADAĞ Ç. H.
APPLIED MATHEMATICAL MODELLING, vol.40, pp.8750-8765, 2016 (SCI-Expanded)
- VI. **Multiplicative neuron model artificial neural network based on Gaussian activation function**
GÜNDOĞDU Ö., Egrioglu E., ALADAĞ Ç. H., YOLCU U.
NEURAL COMPUTING & APPLICATIONS, vol.27, no.4, pp.927-935, 2016 (SCI-Expanded)
- VII. **Fuzzy-time-series network used to forecast linear and nonlinear time series**
BAŞ E., Egrioglu E., ALADAĞ Ç. H., YOLCU U.
APPLIED INTELLIGENCE, vol.43, no.2, pp.343-355, 2015 (SCI-Expanded)
- VIII. **Recurrent Multiplicative Neuron Model Artificial Neural Network for Non-linear Time Series Forecasting**
EĞRİOĞLU E., YOLCU U., ALADAĞ Ç. H., BAŞ E.
NEURAL PROCESSING LETTERS, vol.41, no.2, pp.249-258, 2015 (SCI-Expanded)
- IX. **A NEW MULTILAYER FEEDFORWARD NETWORK BASED ON TRIMMED MEAN NEURON MODEL**

YOLCU U., BAŞ E., Egrioglu E., ALADAĞ Ç. H.

NEURAL NETWORK WORLD, vol.25, no.6, pp.587-602, 2015 (SCI-Expanded)

- X. **A novel membership value based performance measure**
ALADAĞ Ç. H., TÜRKŞEN İ. B.
JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, vol.28, no.2, pp.919-928, 2015 (SCI-Expanded)
- XI. **Fuzzy lagged variable selection in fuzzy time series with genetic algorithms**
ALADAĞ Ç. H., Yolcu U., EĞRİOĞLU E., Bas E.
APPLIED SOFT COMPUTING, vol.22, pp.465-473, 2014 (SCI-Expanded)
- XII. **Robust multilayer neural network based on median neuron model**
ALADAĞ Ç. H., EĞRİOĞLU E., YOLCU U.
NEURAL COMPUTING & APPLICATIONS, vol.24, pp.945-956, 2014 (SCI-Expanded)
- XIII. **A high order seasonal fuzzy time series model and application to international tourism demand of Turkey**
ALADAĞ Ç. H., EĞRİOĞLU E., Yolcu U., USLU V. R.
JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, vol.26, no.1, pp.295-302, 2014 (SCI-Expanded)
- XIV. **An enhanced fuzzy time series forecasting method based on artificial bee colony**
YOLCU U., Cagcag O., ALADAĞ Ç. H., EĞRİOĞLU E.
JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, vol.26, no.6, pp.2627-2637, 2014 (SCI-Expanded)
- XV. **Using Artificial Neural Networks in Fuzzy Time Series Analysis**
Aladag C. H.
RECENT DEVELOPMENTS AND NEW DIRECTIONS IN SOFT COMPUTING, vol.317, pp.443-451, 2014 (SCI-Expanded)
- XVI. **A New Multiplicative Seasonal Neural Network Model Based on Particle Swarm Optimization**
ALADAĞ Ç. H., YOLCU U., EĞRİOĞLU E.
NEURAL PROCESSING LETTERS, vol.37, no.3, pp.251-262, 2013 (SCI-Expanded)
- XVII. **Time-series forecasting with a novel fuzzy time-series approach: an example for Istanbul stock market**
Yolcu U., ALADAĞ Ç. H., EĞRİOĞLU E., USLU V. R.
JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION, vol.83, no.4, pp.597-610, 2013 (SCI-Expanded)
- XVIII. **A new linear & nonlinear artificial neural network model for time series forecasting**
YOLCU U., EĞRİOĞLU E., ALADAĞ Ç. H.
DECISION SUPPORT SYSTEMS, vol.54, no.3, pp.1340-1347, 2013 (SCI-Expanded)
- XIX. **Using multiplicative neuron model to establish fuzzy logic relationships**
Aladag C. H.
EXPERT SYSTEMS WITH APPLICATIONS, vol.40, no.3, pp.850-853, 2013 (SCI-Expanded)
- XX. **Fuzzy time series forecasting with a novel hybrid approach combining fuzzy c-means and neural networks**
EĞRİOĞLU E., ALADAĞ Ç. H., YOLCU U.
EXPERT SYSTEMS WITH APPLICATIONS, vol.40, no.3, pp.854-857, 2013 (SCI-Expanded)
- XXI. **An ARMA Type Fuzzy Time Series Forecasting Method Based on Particle Swarm Optimization**
EĞRİOĞLU E., YOLCU U., ALADAĞ Ç. H., KOÇAK C.
MATHEMATICAL PROBLEMS IN ENGINEERING, vol.2013, 2013 (SCI-Expanded)
- XXII. **A new time invariant fuzzy time series forecasting method based on particle swarm optimization**
ALADAĞ Ç. H., YOLCU U., EĞRİOĞLU E., Dalar A. Z.
APPLIED SOFT COMPUTING, vol.12, no.10, pp.3291-3299, 2012 (SCI-Expanded)
- XXIII. **A SIMULATION BASED APPROACH TO CALCULATE THE FUZZY CORRELATION COEFFICIENT OF FUZZY OBSERVATIONS**
ALADAĞ Ç. H., EĞRİOĞLU E., YOLCU U.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.41, no.3, pp.361-364, 2012 (SCI-Expanded)
- XXIV. **A NEW SEASONAL FUZZY TIME SERIES METHOD BASED ON THE MULTIPLICATIVE NEURON MODEL AND SARIMA**

Aladag S., ALADAĞ Ç. H., MENTEŞ T., EĞRİOĞLU E.

HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.41, no.3, pp.337-345, 2012 (SCI-Expanded)

- XXV. **A tabu search meta-heuristic approach to the dual response systems problem**
ALADAĞ Ç. H., Koeksoy O.
EXPERT SYSTEMS WITH APPLICATIONS, vol.38, no.12, pp.15370-15376, 2011 (SCI-Expanded)
- XXVI. **A new architecture selection method based on tabu search for artificial neural networks**
Aladag C. H.
EXPERT SYSTEMS WITH APPLICATIONS, vol.38, no.4, pp.3287-3293, 2011 (SCI-Expanded)
- XXVII. **Determining the most proper number of cluster in fuzzy clustering by using artificial neural networks**
Erilli N. A., Yolcu U., EĞRİOĞLU E., ALADAĞ Ç. H., ÖNER Y.
EXPERT SYSTEMS WITH APPLICATIONS, vol.38, no.3, pp.2248-2252, 2011 (SCI-Expanded)
- XXVIII. **A new approach based on the optimization of the length of intervals in fuzzy time series**
EĞRİOĞLU E., ALADAĞ Ç. H., Basaran M. A., Yolcu U., USLU V. R.
JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, vol.22, no.1, pp.15-19, 2011 (SCI-Expanded)
- XXIX. **Forecast Combination by Using Artificial Neural Networks**
ALADAĞ Ç. H., EĞRİOĞLU E., Yolcu U.
NEURAL PROCESSING LETTERS, vol.32, no.3, pp.269-276, 2010 (SCI-Expanded)
- XXX. **A high order fuzzy time series forecasting model based on adaptive expectation and artificial neural networks**
ALADAĞ Ç. H., Yolcu U., EĞRİOĞLU E.
MATHEMATICS AND COMPUTERS IN SIMULATION, vol.81, no.4, pp.875-882, 2010 (SCI-Expanded)
- XXXI. **Finding an optimal interval length in high order fuzzy time series**
EĞRİOĞLU E., ALADAĞ Ç. H., Yolcu U., USLU V. R., Basaran M. A.
EXPERT SYSTEMS WITH APPLICATIONS, vol.37, no.7, pp.5052-5055, 2010 (SCI-Expanded)
- XXXII. **Improving weighted information criterion by using optimization**
ALADAĞ Ç. H., EĞRİOĞLU E., GÜNAY S., Basaran M. A.
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.233, no.10, pp.2683-2687, 2010 (SCI-Expanded)
- XXXIII. **MODELING BRAIN WAVE DATA BY USING ARTIFICIAL NEURAL NETWORKS**
ALADAĞ Ç. H., EĞRİOĞLU E., KADILAR C.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.39, no.1, pp.81-88, 2010 (SCI-Expanded)
- XXXIV. **The effect of neighborhood structures on tabu search algorithm in solving course timetabling problem**
ALADAĞ Ç. H., Hocaoglu G., Basaran M. A.
EXPERT SYSTEMS WITH APPLICATIONS, vol.36, no.10, pp.12349-12356, 2009 (SCI-Expanded)
- XXXV. **A new approach based on artificial neural networks for high order multivariate fuzzy time series**
EĞRİOĞLU E., ALADAĞ Ç. H., Yolcu U., USLU V. R., Basaran M. A.
EXPERT SYSTEMS WITH APPLICATIONS, vol.36, no.7, pp.10589-10594, 2009 (SCI-Expanded)
- XXXVI. **Forecasting nonlinear time series with a hybrid methodology**
ALADAĞ Ç. H., EĞRİOĞLU E., KADILAR C.
APPLIED MATHEMATICS LETTERS, vol.22, no.9, pp.1467-1470, 2009 (SCI-Expanded)
- XXXVII. **A new hybrid approach based on SARIMA and partial high order bivariate fuzzy time series forecasting model**
EĞRİOĞLU E., ALADAĞ Ç. H., Yolcu U., Basaran M. A., USLU V. R.
EXPERT SYSTEMS WITH APPLICATIONS, vol.36, no.4, pp.7424-7434, 2009 (SCI-Expanded)
- XXXVIII. **A new approach for determining the length of intervals for fuzzy time series**
Yolcu U., EĞRİOĞLU E., USLU V. R., Basaran M. A., ALADAĞ Ç. H.
APPLIED SOFT COMPUTING, vol.9, no.2, pp.647-651, 2009 (SCI-Expanded)
- XXXIX. **A NEW ARCHITECTURE SELECTION STRATEGY IN SOLVING SEASONAL AUTOREGRESSIVE TIME SERIES BY ARTIFICIAL NEURAL NETWORKS**
ALADAĞ Ç. H., EĞRİOĞLU E., GÜNAY S.

Articles Published in Other Journals

- I. **An enhanced random forest approach using CoClust clustering: MIMIC-III and SMS spam collection application**
İLHAN TAŞKIN Z., YILDIRAK Ş. K., ALADAĞ Ç. H.
JOURNAL OF BIG DATA, vol.10, no.1, 2023 (Scopus)
- II. **The CSS and The Two-Stage Methods for Parameter Estimation in SARFIMA Models**
EĞRİOĞLU E., ALADAĞ Ç. H., KADILAR C.
JOURNAL OF PROBABILITY AND STATISTICS, vol.2011, 2011 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **Volcanic Ash –Aircraft Encounter Damages: in Volcanological Point of View**
AYDAR E., ALADAĞ Ç. H., MENTEŞ T.
European Geosciences Union, Viyana, Austria, 22 - 30 April 2017
- II. **Artificial Neural Network Models for Forecasting Tourist Arrivals to Barcelona**
Alptekin B., ALADAĞ Ç. H.
25th International Conference on Artificial Neural Networks (ICANN), Barcelona, Spain, 6 - 09 September 2016, vol.9886, pp.561
- III. **Recurrent Multiplicative Neuron Model Artificial Neural Network for Non-Linear Time Series Forecasting**
EĞRİOĞLU E., YOLCU U., ALADAĞ Ç. H., BAŞ E.
2nd World Conference on Business, Economics and Management (BEM), Antalya, Turkey, 25 - 28 April 2013, vol.109, pp.1094-1100
- IV. **A new approximation method based on linear programming for fuzzy division**
Basaran M. A., ALADAĞ Ç. H., KADILAR C.
Applied Computing Conference 2008, İstanbul, Turkey, 27 - 30 May 2008, pp.388-389

Supported Projects

ALADAĞ Ç. H., ALPTEKİN D., Project Supported by Higher Education Institutions, Türkiye'de Ekonomik Büyüme ve Turizm: Hsiao'nun Granger Nedensellik Analizi, 2017 - 2017

ALADAĞ Ç. H., Alptekin B., Project Supported by Higher Education Institutions, Yapay Sinir Ağı Modelleri ile Hava Kirliliği Öngörüsü, 2017 - 2017

ALADAĞ Ç. H., GÜNAY S., ALPTEKİN D., Project Supported by Higher Education Institutions, OECD Üyesi Ülkelerde Cinsiyet Gelişmişlik Endeksinin Çok Boyutlu Ölçkleme ile İncelenmesi, 2016 - 2017

Metrics

Publication: 45

Citation (WoS): 950

H-Index (WoS): 18