

## Assoc. Prof. EMEK GÜLDOĞAN



### Personal Information

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### International Researcher IDs

ScholarID: XN1bU4MAAAAJ

ORCID: 0000-0002-5436-8164

Publons / Web Of Science ResearcherID: ABH-5460-2020

ScopusID: 57193501488

Yoksis Researcher ID: 105641

### Education Information

Doctorate, Inonu University, Sağlık Bilimleri Enstitüsü, Biyoistatistik Ve Tıp Bilişimi,  
Turkey 2012 - 2017

Postgraduate, Inonu University, Sağlık Bilimleri Enstitüsü, Biyoistatistik Ve Tıp Bilişimi,  
Turkey 2002 - 2005

Undergraduate, Middle East Technical University, Faculty Of Engineering, Bilgisayar  
Mühendisliği, Turkey 1996 - 2001

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Çeşitli çekirdek fonksiyonları ile oluşturulan destek vektör makinesi modellerinin performanslarının  
incelenmesi: Bir klinik uygulama, Inonu University, Tıp Fakültesi, Temel Tıp Bilimleri Bölümü, 2017

Postgraduate, Turgut Özal Tıp Merkezi hastane otomasyonundaki laboratuvar sonuçlarının SPSS paket programına  
aktarılabilmesi için ara yüz yazılımı geliştirilmesi, Inonu University, Sağlık Bilimleri Enstitüsü, Biyoistatistik Ve Tıp Bilişimi  
(YI), 2005

### Research Areas

Medicine, Health Sciences, Fundamental Medical Sciences, Biostatistics and Medical Informatics

### Academic Titles / Tasks

Associate Professor, Inonu University, Tıp Fakültesi, Temel Tıp Bilimleri, 2022 - Continues

Assistant Professor, Inonu University, Tıp Fakültesi, Temel Tıp Bilimleri, 2018 - 2021

Assistant Professor, Inonu University, Tıp Fakültesi, Temel Tıp Bilimleri, 2017 - 2018

Lecturer, Inonu University, Tıp Fakültesi, Temel Tıp Bilimleri, 2008 - 2017

Instructor, Inonu University, Rektörlük, Enformatik Bölüm Başkanlığı, 2001 - 2008

## Academic and Administrative Experience

Sınav Değerlendirme Sorumlusu, Inonu University, Tıp Fakültesi, Temel Tıp Bilimleri, 2014 - Continues

Bilgi İşlem Müdürü, Inonu University, Tıp Fakültesi, Turgut Özal Tıp Merkezi, 2009 - Continues

Assistant Coordinator, Inonu University, Tıp Fakültesi, Temel Tıp Bilimleri, 2011 - 2022

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Prediction of Postcoronary Artery Bypass Grafting Atrial Fibrillation: POAFRiskScore Tool.**  
Arslan A. K., Erdil N., Guldogan E., Colak C., Akca B., Colak M. C.  
The Thoracic and cardiovascular surgeon, vol.71, no.04, pp.282-290, 2023 (SCI-Expanded)
- II. **Effect of the COVID-19 pandemic on patients with presumed diagnosis of acute appendicitis.**  
Akbulut A. S., Tuncer A., Ögüt Z., Şahin T. T., Koç C., GÜLDOĞAN E., Karabulut E., Tanriverdi E. S., Özer A.  
WORLD JOURNAL OF CLINICAL CASES, vol.10, no.29, pp.10487-10500, 2022 (SCI-Expanded)
- III. **ARTIFICIAL INTELLIGENCE-ASSISTED PREDICTION OF COVID-19 STATUS BASED ON THORAX CT SCANS USING A PROPOSED META-LEARNING STRATEGY**  
GÜLDOĞAN E., Yilderim I. O., Sevgi S., ÇOLAK C.  
ACTA MEDICA MEDITERRANEA, vol.38, no.3, pp.1515-1521, 2022 (SCI-Expanded)
- IV. **PREDICTION OF COVID-19 SEVERITY IN SARS-COV-2 RNA-POSITIVE PATIENTS BY DIFFERENT ENSEMBLE LEARNING STRATEGIES**  
GÖZÜKARA BAĞ H. G., Kivrak M., GÜLDOĞAN E., ÇOLAK C.  
ACTA MEDICA MEDITERRANEA, vol.38, no.2, pp.1085-1091, 2022 (SCI-Expanded)
- V. **Multi-parameter-based radiological diagnosis of Chiari Malformation using Machine Learning Technology**  
Tetik B., Dogan G. M., PAŞAHAN R., DURAK M. A., GÜLDOĞAN E., SARAÇ K., Onal C., YILDIRIM İ. O.  
INTERNATIONAL JOURNAL OF CLINICAL PRACTICE, vol.75, no.11, 2021 (SCI-Expanded)
- VI. **Prediction of death status on the course of treatment in SARS-COV-2 patients with deep learning and machine learning methods**  
Kivrak M., GÜLDOĞAN E., ÇOLAK C.  
COMPUTER METHODS AND PROGRAMS IN BIOMEDICINE, vol.201, 2021 (SCI-Expanded)
- VII. **The role of physical activity on mental health and quality of life during COVID-19 outbreak: A cross-sectional study**  
Ozdemir F., Cansel N., Kizilay F., Guldogan E., Ucuş İ., Sinanoglu B., Colak C., Cumurcu H.  
EUROPEAN JOURNAL OF INTEGRATIVE MEDICINE, vol.40, 2020 (SCI-Expanded)
- VIII. **An intelligent system for the classification of postoperative pleural effusion between 4 and 30 days using medical knowledge discovery.**  
GÜLDOĞAN E., ARSLAN A. K., ÇOLAK M. C., ÇOLAK C., ERDİL N.  
BIOMEDICAL RESEARCH-INDIA, vol.28, no.4, pp.1553-1556, 2017 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Development of Artificial Intelligence Based Clinical Decision Support System on Medical Images for the Classification of COVID-19**  
ÇOLAK C., ASLAN A. K., UCUZAL H., KÖSE A., YILDIRIM İ. O., GÜLDOĞAN E., ÇOLAK M. C.

IMJ : INTERNATIONAL MEDICAL JOURNAL, vol.5, no.1, pp.20-23, 2023 (Scopus)

- II. **A Retrospective Evaluation of Serological Results of Cystic Echinococcosis Suspected Cases Admitted to Adiyaman Training and Research Hospital Between 2013-2020**  
ÇELİK T., ALEV C., AKGÜN S., GÜLDOĞAN E., ŞAHİN F.  
TÜRKİYE PARAZİTOLOJİ DERGİSİ / TÜRKİYE PARAZİTOLOJİ DERNEĞİ = ACTA PARASITOLOGICA TURCICA / TURKISH SOCIETY FOR PARASITOLOGY, vol.46, no.2, pp.140-144, 2022 (Scopus)
- III. **Investigation of Usability Of Artificial Intelligence Semantic Video Processing Methods in Medicine**  
KÜÇÜKAKÇALI Z., UCUZAL H., GÜLDOĞAN E.  
Medical records-international medical journal (Online), vol.4, no.3, pp.297-303, 2022 (Peer-Reviewed Journal)
- IV. **Artificial Intelligence Based Video Processing Methods for Predicting COVID-19: Observational Study**  
YAĞIN B., GÜLDOĞAN E., ÇOLAK C.  
Türkiye Klinikleri Biyoistatistik Dergisi, vol.14, no.1, pp.22-31, 2022 (Peer-Reviewed Journal)
- V. **The Effect of Sociodemographic Variables, Body Image and Self-Esteem on Undergoing Minimally Invasive Cosmetic Procedures in Turkish Women: Cross-Sectional Research**  
CANSEL N., GÜLDOĞAN E., ALTUNIŞIK N.  
TURKIYE KLINIKLERI DERMATOLOJİ, vol.31, no.3, pp.207-216, 2021 (Scopus)
- VI. **Can melatonin correct the negative effect of experimental diabetes created during the maternal period on fetal rat development and puppies cognitive functions?**  
EVREN B., TULAY KÖZ S., ÖZKAN Y., GÜLDOĞAN E.  
Annals of Medical Research, vol.28, no.11, pp.2080-2089, 2021 (Peer-Reviewed Journal)
- VII. **A Computer-Assisted Diagnosis Tool for Classifying COVID-19 based on Chest X-Ray Images**  
Yağın F. H., Güldoğan E., Ucuza H., Çolak C.  
KONURALP TIP DERGİSİ, vol.13, no.1, pp.438-441, 2021 (ESCI)
- VIII. **Detection of Different Tissue Types of Colorectal Cancer Based on Histological Images Using Deep Learning Approach**  
GÜLDOĞAN E., KÜÇÜKAKÇALI Z., UCUZAL H., ÇOLAK C.  
Turkiye Klinikleri Journal of Biostatistics, vol.13, no.2, pp.147-159, 2021 (Peer-Reviewed Journal)
- IX. **Management of Stabil Vertebra Fractures in Patients Underwent Liver Transplantation**  
PAŞAHAN R., TETİK B., GÜLDOĞAN E., BAŞKIRAN A., YILMAZ S.  
Middle Black Sea Journal of Health Science, vol.7, no.2, pp.186-197, 2021 (Peer-Reviewed Journal)
- X. **Non-traumatic non-aneurysmal subarachnoid haemorrhage: Single institutional experience**  
PAŞAHAN R., TETİK B., GÜLDOĞAN E., DURAK M. A., YILDIRIM İ. O.  
Annals of Medical Research, vol.28, no.7, pp.1411-1416, 2021 (Peer-Reviewed Journal)
- XI. **Clinical and radiological outcomes of patients on whom posterior C1-C2 stabilization is applied in C2 odontoid fractures**  
PAŞAHAN R., GÜLDOĞAN E.  
Medicine Science | International Medical Journal, vol.10, no.2, pp.592-595, 2021 (Peer-Reviewed Journal)
- XII. **Classification of chronic kidney failure by applying different tree-based methods on a medical data set**  
GÜLDOĞAN E., KUCUKAKCALI Z.  
Medicine Science | International Medical Journal, vol.10, no.2, pp.600-694, 2021 (Peer-Reviewed Journal)
- XIII. **A Proposed Ensemble Model for The Prediction of Coronavirus Anxiety Scale of Migrant Workers**  
GÜLDOĞAN E.  
Balkan Journal of Electrical and Computer Engineering, vol.9, no.2, pp.187-190, 2021 (Peer-Reviewed Journal)
- XIV. **Transfer Learning-Based Classification of Breast Cancer using Ultrasound Images**  
GÜLDOĞAN E., UCUZAL H., KUCUKAKCALI Z., ÇOLAK C.  
Middle Black Sea Journal of Health Science, vol.7, no.1, pp.74-80, 2021 (Peer-Reviewed Journal)
- XV. **Periferik Sinir Yaralanmaları Ve Cerrahi Sonuçları**  
PAŞAHAN R., GÖLÇEK C., GÜLDOĞAN E.  
İnönü Üniversitesi Sağlık Hizmetleri Meslek Yüksek Okulu Dergisi, vol.9, no.1, pp.71-77, 2021 (Peer-Reviewed Journal)

- XVI. **A WEB-BASED SOFTWARE FOR THE CALCULATION OF THEORETICAL PROBABILITY DISTRIBUTIONS**  
YAĞIN F. H., GÜLDOĞAN E., ÇOLAK C.  
The Journal of Cognitive Systems, vol.6, no.1, pp.45-50, 2020 (Peer-Reviewed Journal)
- XVII. **Performance Evaluation of Different Artificial Neural Network Models in the Classification of Type 2 Diabetes Mellitus**  
GÜLDOĞAN E., TUNÇ Z., ACET A., ÇOLAK C.  
The Journal of Cognitive Systems, vol.5, no.1, pp.23-32, 2020 (Peer-Reviewed Journal)
- XVIII. **A web-based software developed for permutation tests and an application in medicine**  
KÜÇÜKAKÇALI Z., YAŞAR Ş., GÜLDOĞAN E., ÇOLAK C.  
Middle Black Sea Journal of Health Science, pp.206-210, 2020 (Peer-Reviewed Journal)
- XIX. **Clinical Outcomes of Patients Undergoing Kyphoplasty due to Vertebral Compression Fracture: A Retrospective Examination of 52 Patients**  
PAŞAHAN R., GÜLDOĞAN E.  
Middle Black Sea Journal of Health Science, vol.6, no.2, pp.183-189, 2020 (Peer-Reviewed Journal)
- XX. **Performance Evaluation of the Different Artificial Neural Network Models in the Classification of Type 2 Diabetes Mellitus**  
GÜLDOĞAN E., KÜÇÜKAKÇALI Z., ayça a., ÇOLAK C.  
The journal of cognitive systems, 2020 (Peer-Reviewed Journal)
- XXI. **COMPARISON OF DIFFERENT DECISION TREE MODELS INCLASSIFICATION OF ANGINA PECTORIS DISEASE**  
BALIKÇI ÇİÇEK İ., KÜÇÜKAKÇALI Z., GÜLDOĞAN E.  
the journal of cognitive systems, 2020 (Peer-Reviewed Journal)
- XXII. **The comparison of effects of thiopental and ketofol on emergence agitation in patients with nasal surgery: A prospective, single-blind, randomized clinical trial**  
KARAASLAN E., GÜLDOĞAN E.  
Annals of Medical Research, vol.27, no.1, pp.52-57, 2020 (Peer-Reviewed Journal)
- XXIII. **ASSESSMENT OF ASSOCIATIVE CLASSIFICATION APPROACH FOR PREDICTING MORTALITY BY HEART FAILURE**  
KÜÇÜKAKÇALI Z., BALIKÇI ÇİÇEK İ., GÜLDOĞAN E., ÇOLAK C.  
The Journal of Cognitive Systems, 2020 (Peer-Reviewed Journal)
- XXIV. **Classification of Breast Cancer and Determination of Related Factors with Deep Learning Approach**  
GÜLDOĞAN E., KÜÇÜKAKÇALI Z., ÇOLAK C.  
the journal of cognitive systems, 2020 (Peer-Reviewed Journal)
- XXV. **İşgücüne Katılma Durumunu Etkileyen Faktörlerin Kategorik Regresyon İle Çözümlemesi**  
SAKLIYAN S., KIVRAK M., GÜLDOĞAN E., ARSLAN A. K., ÇOLAK C.  
Akademik Yaklaşımlar Dergisi, vol.11, no.1, pp.35-45, 2020 (Peer-Reviewed Journal)
- XXVI. **PERFORMANCE EVALUATION OF THE DEEP LEARNING MODELS IN THE CLASSIFICATION OF HEART ATTACK AND DETERMINATION OF RELATED FACTORS**  
KÜÇÜKAKÇALI Z., BALIKÇI ÇİÇEK İ., GÜLDOĞAN E.  
The Journal of Cognitive Systems, 2020 (Peer-Reviewed Journal)
- XXVII. **Performance Comparison of Some Imputation Methods Used in Missing Value(s) Analysis: A Simulation Study**  
ARSLAN A. K., TUNÇ Z., GÜLDOĞAN E., ÇOLAK C.  
Türkiye Klinikleri Journal of Biostatistics, vol.11, no.1, pp.15-23, 2019 (Peer-Reviewed Journal)
- XXVIII. **Çeşitli Çekirdek Fonksiyonları ile Oluşturulan Destek Vektör Makinesi Modellerinin Performanslarının İncelenmesi: Bir Klinik Uygulama**  
GÜLDOĞAN E., ARSLAN A. K., YAĞMUR J.  
Fırat Tıp Dergisi, vol.22, no.3, pp.136-142, 2017 (Peer-Reviewed Journal)
- XXIX. **Myocardial Infarction Classification with Support Vector Machine Models**  
GÜLDOĞAN E., YAĞMUR J., YOLOĞLU S., ASYALI M. H., ÇOLAK C.  
Annals of Medical Research, vol.22, no.2, pp.221-224, 2015 (Peer-Reviewed Journal)

- XXX. **Development of web-based software for acute coronary syndrome and a medical data mining application**  
GÜLDOĞAN E., YAĞMUR J.  
Journal of Turgut Ozal Medical Center, vol.24, no.3, pp.319, 2015 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **The Effects of Different Doses of Dexmedetomidine on Wound Healing**  
KARAASLAN E., ÖZKAN A. S., AKBAŞ S., TÜRKÖZ Y., YILDIZ A., ÜREMİŞ N., GÜLDOĞAN E., VARDI N., YILDIZ T.  
Türk Anesteziyoloji ve Reanimasyon Derneği 55.Ulusal Kongresi, Antalya, Turkey, 28 October 2021
- II. **Transfer Learning-Based Prediction of Covid-19 Status Through The Medical Images Extracted From Ultrasound Videos**  
GÜLDOĞAN E.  
4TH INTERNATIONAL CONFERENCE ON COVID-19 STUDIES, Turkey, 17 - 19 April 2021
- III. **Is there relationship between serum Igf-1 and thyroid nodule thyroid or ovarian volume in polycystic ovarian syndrome**  
TOPALOĞLU Ö., EVREN B., UZUN M., YOLOĞLU S., GÜLDOĞAN E., ŞAHİN İ.  
22nd European Congress of Endocrinology, United Kingdom, 5 - 09 September 2020, vol.70, pp.555
- IV. **ARM: An Interactive Web Software for Association Rules Mining and an Application in Medicine**  
PERÇİN İ., YAĞIN F. H., GÜLDOĞAN E., YOLOĞLU S.  
2019 International Artificial Intelligence and Data Processing Symposium (IDAP), Malatya, Turkey, 21 - 22 September 2019
- V. **Prediction of Melanoma from Dermoscopic Images Using Deep Learning-Based Artificial Intelligence Techniques**  
Kaplan A., GÜLDOĞAN E., ÇOLAK C., ARSLAN A.  
International Conference on Artificial Intelligence and Data Processing (IDAP), Malatya, Turkey, 21 - 22 September 2019
- VI. **Performance Comparison of Some Imputation Methods Used in Missing Value(s) Analysis: A Simulation Study**  
ARSLAN A. K., TUNÇ Z., GÜLDOĞAN E., ÇOLAK C.  
ISDC2018, 3 - 07 October 2018
- VII. **KDAY: Kayıp Değer Analizinde Kullanılan Çeşitli Tekniklerin Performansını Karşılaştıran Web Tabanlı Bir Yazılım**  
ARSLAN A. K., GÜLDOĞAN E., ÇOLAK C.  
XVIII. Uluslararası Ekonometri, Yöneylem Araştırması ve İstatistik Sempozyumu, 5 - 07 October 2017
- VIII. **Makine Öğrenmesi Yaklaşımlarından Aşırı Öğrenme Makinesinin Sınıflandırma Performansının Değerlendirilmesi Bir Simülasyon Çalışması**  
ARSLAN A. K., GÜLDOĞAN E., ÇOLAK C.  
I. International Biostatistics Congress, Turkey, 26 - 29 October 2016
- IX. **An Intelligent System for the Classification of Postoperative Pleural Effusion between 4 and 30 days using Medical Knowledge Discovery**  
GÜLDOĞAN E., ARSLAN A. K., ÇOLAK M. C., ÇOLAK C., ERDİL N.  
I. International Biostatistics Congress, Turkey, 26 - 29 October 2016
- X. **Robust Regresyon Tahmin Yöntemleri İle En Küçük Kareler Regresyonunun Karşılaştırılması Ve Uygulaması**  
İNCEOĞLU F., KILIÇ T., GÜLDOĞAN E., ÇOLAK C., YOLOĞLU S.  
XVI. Ulusal Biyoistatistik Kongresi, Antalya, Turkey, 10 - 12 September 2014
- XI. **Destek Vektör Makinesi Modelleri ile Miyokard İnfarktüsün Sınıflandırılması**  
GÜLDOĞAN E., AKAYCAN J., YOLOĞLU S., ASYALI M. H., ÇOLAK C.  
XIV. Ulusal Biyoistatistik Kongresi, Kayseri, Turkey, 4 - 07 September 2012

## Supported Projects

GÜLDOĞAN E., YAĞIN B., Project Supported by Higher Education Institutions, Yapay Zeka Tabanlı Görüntü İşleme Yöntemleri ile COVID-19 Tahmini, 2021 - 2022

ÇOLAK C., ÇOLAK M. C., GÜLDOĞAN E., ARSLAN A. K., UCUZAL H., KÖSE A., YILDIRIM İ. O., Project Supported by Higher Education Institutions, Covid-19 Tanısına Yönelik Tıbbi Görüntülere Dayalı Yapay Zeka Tabanlı Klinik Karar Destek Sistemlerinin Geliştirilmesi, 2020 - 2022

ÇOLAK M. C., KÖSE E., ERDİL N., ÇOLAK C., ARSLAN A. K., ERMİŞ N., GÜLDOĞAN E., UCUZAL H., UCUZAL H., UCUZAL H., Project Supported by Higher Education Institutions, İnönü Üniversitesi Turgut Özal Tıp Merkezinde Koroner Arter Bypass Operasyonu Yapılan Hastalarda Gelişen Postoperatif Atriyal Fibrilasyonun Tıbbi Bilgi Keşfi Süreci ile Tahmini, 2017 - 2020

## Metrics

Publication: 49

Citation (WoS): 17

H-Index (WoS): 2