

## Prof.Dr. Tahir Çetin Akıncı

### Kişisel Bilgiler

İş Telefonu: [+90 1111 111 11111111](tel:+9011111111111111)

Fax Telefonu: [+90 1111 111 11111111111](tel:+9011111111111111)

E-posta: [akincitc@itu.edu.tr](mailto:akincitc@itu.edu.tr)

Web: <https://avesis.itu.edu.tr/akincitc>

Posta Adresi: Istanbul Technical University, Electrical & Electronics Faculty, Department of Electrical Engineering, İstanbul, Türkiye.

### Uluslararası Araştırmacı ID'leri

ScholarID: GR2VnR4AAAAJ

ORCID: 0000-0002-4657-6617

Publons / Web Of Science ResearcherID: A-2838-2016

ScopusID: 16229256000

Yoksis Araştırmacı ID: 40367

### Eğitim Bilgileri

Lisans, Klaipedos Universitetas, Electrical Engineering, Litvanya 2009 - 2012

Doktora, Marmara Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik Eğitimi (Dr), Türkiye 2005 - 2009

Yüksek Lisans, Marmara Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik Eğitimi Bölümü, Türkiye 2003 - 2005

### Yaptığı Tezler

Doktora, Güç sistemlerinde ferrerezonans olayının spektral ve dalgacık analizi yöntemleriyle belirlenmesi, Marmara Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik Eğitimi (Dr), 2009

### Araştırma Alanları

Bilgi Sistemleri, Haberleşme ve Kontrol Mühendisliği, Sinyal İşleme, Sinyal İşleme Kuramı ve Metotları, Bilgisayar Bilimleri, Yapay Zeka, Bilgisayarda Öğrenme ve Örüntü Tanıma, İnsan Bilgisayar Etkileşimi, Elektrik-Elektronik Mühendisliği, Elektronik, Dönüştürücüler ve Algılama Aygıtları, Enerji, Yenilenebilir Enerji, Mühendislik ve Teknoloji

### Akademik Unvanlar / Görevler

Doç.Dr., İstanbul Teknik Üniversitesi, Elektrik-Elektronik, Elektrik Mühendisliği, 2016 - 2020

Araştırma Görevlisi, Marmara Üniversitesi, Elektrik Eğitimi Bölümü, 2003 - 2010

### Akademik İdari Deneyim

Dekan Yardımcısı, İstanbul Teknik Üniversitesi, Elektrik-Elektronik, 2020 - 2021

Dekan Yardımcısı, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, 2019 - 2020

Kırklareli Üniversitesi, Mühendislik Fakültesi, 2011 - 2013

## Verdiği Dersler

Computer Networks for Power Systems, Lisans, 2019 - 2020

Sayısal Elektronik Devreler, Lisans, 2017 - 2018

introduction to computer science using python, Lisans, 2017 - 2018

## SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **An Innovative Approach to Electrical Motor Geometry Generation using Machine Learning and Image Processing Techniques**  
DEMİR U., AKGÜN G., AKÜNER M. C., Pourkarimi M., AKGÜN Ö., Akıncı T. Ç.  
IEEE Access, cilt11, ss.48651-48666, 2023 (SCI-Expanded)
- II. **Estimating Average Power of Welding Process with Emitted Noises based on Adaptive Neuro Fuzzy Inference System**  
GÖKMEN G., Akıncı T. Ç., Kocyigit G., KIYAK İ., İlhan Akbas M.  
IEEE Access, cilt11, ss.39154-39164, 2023 (SCI-Expanded)
- III. **Optimizing Security Systems with an Optimum Design of a Hybrid Renewable Energy System**  
Kiyak M. H., Pürlü M., Emre Turkay B., Akıncı T. Ç.  
Electric Power Components and Systems, 2023 (SCI-Expanded)
- IV. **Algorithms to Measure Area and Volume on 3D Face Models for Facial Surgeries**  
Topsakal O., Sawyer P., Akıncı T. Ç., Celikoyar M.  
IEEE Access, 2023 (SCI-Expanded)
- V. **Machine Learning-Based Error Correction Codes and Communication Protocols for Power Line Communication: An Overview**  
Akıncı T. Ç., Erdemir G., Zengin A. T., Şeker Ş. S., Idriss A. I.  
IEEE Access, cilt11, ss.124760-124781, 2023 (SCI-Expanded)
- VI. **Feature Extraction and NN-based Enhanced Test Maneuver Deployment for 2 DoF Vehicle Simulator**  
DEMİR U., AKGÜN G., AKÜNER M. C., Demirci B., AKGÜN Ö., Akıncı T. Ç.  
IEEE Access, cilt11, ss.36218-36232, 2023 (SCI-Expanded)
- VII. **Diagnosis of Chaotic Ferroresonance Phenomena Using Deep Learning**  
NOĞAY H. S., Akıncı T. Ç., Akbas M. I., Tokic A.  
IEEE Access, cilt11, ss.58937-58946, 2023 (SCI-Expanded)
- VIII. **Automatic detection of brain tumors with the aid of ensemble deep learning architectures and class activation map indicators by employing magnetic resonance images**  
Turk O., Ozhan D., Acar E., Akıncı T. Ç., Yilmaz M.  
Zeitschrift fur Medizinische Physik, 2023 (SCI-Expanded)
- IX. **Assessment of Hematological Predictors via Explainable Artificial Intelligence in the Prediction of Acute Myocardial Infarction**  
Yilmaz R., YAĞIN F. H., Raza A., ÇOLAK C., Akıncı T. Ç.  
IEEE Access, cilt11, ss.108591-108602, 2023 (SCI-Expanded)
- X. **Detecting Facial Landmarks on 3D Models Based on Geometric Properties &#x2013; A Review of Algorithms, Enhancements, Additions and Open-Source Implementations**  
Topsakal O., Akıncı T. Ç., Murphy J., Preston T., Celikoyar M.  
IEEE Access, cilt11, ss.25593-25603, 2023 (SCI-Expanded)
- XI. **Utilization of Machine Learning for the Objective Assessment of Rhinoplasty Outcomes**  
Topsakal O., Dobratz E. J., Akbas M. I., Dougherty W. M., Akıncı T. Ç., Celikoyar M. M.  
IEEE Access, cilt11, ss.42135-42145, 2023 (SCI-Expanded)

- XII. **High Order Spectral Analysis of Ferroresonance Phenomena in Electric Power Systems**  
Akıncı T. Ç., AKGÜN Ö., Yılmaz M., Martinez-Morales A. A.  
IEEE Access, cilt.11, ss.61289-61297, 2023 (SCI-Expanded)
- XIII. **Detection of invisible cracks in ceramic materials using by pre-trained deep convolutional neural network**  
NOĞAY H. S., Akıncı T. Ç., YILMAZ M.  
NEURAL COMPUTING & APPLICATIONS, cilt.34, sa.2, ss.1423-1432, 2022 (SCI-Expanded)
- XIV. **Classification of operation cases in electric arc welding machine by using deep convolutional neural networks**  
NOĞAY H. S., Akıncı T. Ç.  
NEURAL COMPUTING & APPLICATIONS, cilt.33, sa.12, ss.6657-6670, 2021 (SCI-Expanded)
- XV. **A THERMAL QUANTUM CLASSIFIER**  
Korkmaz U., Türkpençe D., Akıncı T. Ç., Seker S.  
QUANTUM INFORMATION & COMPUTATION, cilt.20, ss.969-986, 2020 (SCI-Expanded)
- XVI. **Measurement of Power Line Sagging Using Sensor Data of a Power Line Inspection Robot**  
Zengin A. T., Erdemir G., Akıncı T. Ç., Seker S.  
IEEE ACCESS, cilt.8, ss.99198-99204, 2020 (SCI-Expanded)
- XVII. **Analysis of instantaneous frequency, instantaneous amplitude and phase angle of ferroresonance in electrical power networks**  
AKGÜN Ö., Akıncı T. Ç., Erdemir G., Seker S.  
JOURNAL OF ELECTRICAL ENGINEERING-ELEKTROTECHNICKY CASOPIS, cilt.70, sa.6, ss.494-498, 2019 (SCI-Expanded)
- XVIII. **Wind energy potential and micro-turbine performance analysis in Djibouti-city, Djibouti**  
Ibrahim Idris A., Ali Ahmed R., Idriss Oma A., Kassim Said R., AKINCI T. Ç.  
ENGINEERING SCIENCE AND TECHNOLOGY-AN INTERNATIONAL JOURNAL-JESTECH, 2019 (SCI-Expanded)
- XIX. **A steady state quantum classifier**  
Türkpençe D., Akıncı T. Ç., Seker S.  
PHYSICS LETTERS A, cilt.383, sa.13, ss.1410-1418, 2019 (SCI-Expanded)
- XX. **Analysis of Gait Dynamics of ALS Disease and Classification of Artificial Neural Networks**  
Akgun O., Akan A., Demir H., Akıncı T. Ç.  
TEHNICKI VJESNIK-TECHNICAL GAZETTE, cilt.25, ss.183-187, 2018 (SCI-Expanded)
- XXI. **Fast fourier transformation of emitted noises from welding machines and their classification with acoustic method**  
Gokmen G., Akgun O., Akıncı T. Ç., Şeker Ş. S.  
MECHANIKA, cilt.23, sa.4, ss.588-593, 2017 (SCI-Expanded)
- XXII. **The determination of short circuits and grounding faults in electric power systems using time frequency analysis**  
ESEN V., ORAL B., Akıncı T. Ç.  
Journal of Energy in Southern Africa, cilt.26, sa.2, ss.123-132, 2015 (SCI-Expanded)
- XXIII. **Determination of Wind Energy Potential in Kırklareli-Turkey**  
Ersoz S., Akıncı T. Ç., Nogay H. S., Dogan G.  
INTERNATIONAL JOURNAL OF GREEN ENERGY, cilt.10, sa.1, ss.103-116, 2013 (SCI-Expanded)
- XXIV. **Application of artificial neural networks for short term wind speed forecasting in Mardin Turkey**  
NOĞAY H. S., Akıncı T. Ç., Eidueviite M. E.  
Journal of Energy in Southern Africa, cilt.23, sa.4, 2012 (SCI-Expanded)
- XXV. **Wind Speed Correlation Between Neighboring Measuring Stations**  
Akıncı T. Ç., Nogay H. S.  
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, cilt.37, sa.4, ss.1007-1019, 2012 (SCI-Expanded)
- XXVI. **Spectral and statistical analysis for ferroresonance phenomenon in electric power systems**  
Seker S., Akıncı T. Ç., Taskin S.  
ELECTRICAL ENGINEERING, cilt.94, sa.2, ss.117-124, 2012 (SCI-Expanded)

- XXVII. **Application of wavelet transform to defect detection of building's structure**  
Volkovas V., EIDUKEVICIUTE M., Nogay H. S., Akinci T. Ç.  
MECHANIKA, sa.6, ss.683-690, 2012 (SCI-Expanded)
- XXVIII. **Short Term Wind Speed Forecasting with ANN in Batman Turkey**  
Akinci T. Ç.  
ELEKTRONIKA IR ELEKTROTEHNIKA, cilt.1, sa.107, ss.41-45, 2011 (SCI-Expanded)

## **Diğer Dergilerde Yayınlanan Makaleler**

- I. **Signal Processing Application Based on a Hybrid Wavelet Transform to Fault Detection and Identification in Power System**  
Nasser Mohamed Y., Şeker Ş. S., Akinci T. Ç.  
Information (Switzerland), cilt.14, sa.10, 2023 (ESCI)
- II. **Comparison of Automated Machine Learning (AutoML) Tools for Epileptic Seizure Detection Using Electroencephalograms (EEG)**  
Lenkala S., Marry R., Gopovaram S. R., Akinci T. Ç., Topsakal O.  
Computers, cilt.12, sa.10, 2023 (ESCI)
- III. **Determination of isolator damages in electric power transmission lines with continuous wavelet transform and multitape power spectrum density**  
Akinci T. Ç., Chung W.  
WORLD JOURNAL OF SCIENCE TECHNOLOGY AND SUSTAINABLE DEVELOPMENT, cilt.18, sa.4, ss.393-404, 2021 (ESCI)
- IV. **Comparative Experimental Investigation and Application of Five Classic Pre-Trained Deep Convolutional Neural Networks via Transfer Learning for Diagnosis of Breast Cancer**  
NOĞAY H. S., Akinci T. Ç., YILMAZ M.  
ADVANCES IN SCIENCE AND TECHNOLOGY-RESEARCH JOURNAL, cilt.15, sa.3, ss.1-8, 2021 (ESCI)
- V. **Short-term wind speed forecasting system using deep learning for wind turbine applications**  
Erdemir G., Zengin A. T., Akinci T. Ç.  
International Journal of Electrical and Computer Engineering, cilt.10, sa.6, ss.5779-5784, 2020 (Scopus)
- VI. **Accuracy of Eight Probability Distribution Functions for Modeling Wind Speed Data in Djibouti**  
Idriss A. I., Mohamed A. A., Akinci T. Ç., Ahmed R. A., Omar A. I., Çağlar R., Seker S.  
INTERNATIONAL JOURNAL OF RENEWABLE ENERGY RESEARCH, cilt.10, sa.2, ss.780-790, 2020 (ESCI)
- VII. **Noise identification based on spectral analysis and noisy transfer function approach for fuel cells**  
Akinci T. Ç., Seker S., DURSUN E., KILIÇ O.  
NOISE MAPPING, cilt.7, sa.1, ss.14-20, 2020 (ESCI)
- VIII. **Bosnia and herzegovina's renewable energy policy and perspective**  
Tokic A., Akinci T. Ç., Zengin A. T.  
International Journal of Energy Economics and Policy, cilt.10, sa.5, ss.524-530, 2020 (Scopus)
- IX. **ROSETLineBot: One-Wheel-Drive Low-Cost Power Line Inspection Robot Design and Control**  
ZENGİN A. T., ERDEMİR G., AKINCI T. Ç., Selçuk F. A., ERDURAN M. N., ŞEKER Ş. S.  
JOURNAL OF ELECTRICAL SYSTEMS, cilt.15, sa.4, ss.626-634, 2019 (ESCI)
- X. **Suitability and Evaluating Wind Speed Probability Distribution Models in a Hot Climate: Djibouti Case Study**  
Idriss A. I., Ahmed R. A., Said R. K., Omar A. I., Barutçu B., Mohamed A. A., Akinci T. Ç.  
INTERNATIONAL JOURNAL OF RENEWABLE ENERGY RESEARCH, cilt.9, sa.3, ss.1586-1596, 2019 (ESCI)
- XI. **APPLICATION OF DECISION TREE METHODS FOR WIND SPEED ESTIMATION**  
NOĞAY H. S., AKINCI T. Ç.  
European Journal of Technic, cilt.9, sa.1, ss.74-83, 2019 (Hakemli Dergi)
- XII. **International Journal of Renewable Energy Research**  
Ibrahim Idris A., Ali Ahmed R., Kassim Said R., Idriss Oma A., BARUTÇU B., Awalo Mohamed A., AKINCI T. Ç.

- INTERNATIONAL JOURNAL OF RENEWABLE ENERGY RESEARCH, cilt.9, sa.3, ss.1586-1596, 2019 (Scopus)
- XIII. **A CONVOLUTIONAL NEURAL NETWORK APPLICATION FOR THE CLASSIFICATION OF LUNG CANCER TYPES**  
NOĞAY H. S., AKINCI T. Ç., ERDEMİR G.  
Industrial Technologies, cilt.5, sa.1, ss.7-12, 2018 (Hakemli Dergi)
- XIV. **ESTIMATION OF HEAD NECK CANCER STAGE BY USING DEEP CONVOLUTIONAL NEURAL NETWORKS**  
NOĞAY H. S., AKINCI T. Ç., ERDEMİR G.  
Industrial Technologies, cilt.5, sa.1, ss.13-19, 2018 (Hakemli Dergi)
- XV. **CALCULATION OF DIELECTRIC DISSIPATION FACTOR AT VARIABLE FREQUENCIES OF MODEL TRANSFORMER**  
KAYA O., AKINCI T. Ç., ÖNAL Ş. E.  
JOURNAL OF THE TECHNICAL UNIVERSITY - SOFIA PLOVDIV BRANCH, BULGARIA FUNDAMENTAL SCIENCES AND APPLICATIONS, cilt.24, sa.1, ss.55-59, 2018 (Hakemli Dergi)
- XVI. **A Convolutional Neural Network Application for Predicting the Locating of Squamous Cell Carcinoma in the Lung**  
NOĞAY H. S., AKINCI T. Ç.  
Balkan Journal of Electrical and Computer Engineering, cilt.6, sa.3, ss.207-210, 2018 (Hakemli Dergi)
- XVII. **Bispectrum and Energy Analysis of Wind Speed Data**  
AKINCI T. Ç., ŞEKER Ş. S., DİKUN J., AKGÜN Ö., ERDEMİR G.  
International Journal of Electrical Energy, cilt.5, sa.1, ss.87-91, 2017 (Hakemli Dergi)
- XVIII. **Bispectrum and Energy Analysis of Wind Speed Data**  
AKINCI T. Ç., ŞEKER Ş. S., AKGÜN Ö., DİKUN J., ERDEMİR G.  
International Journal of Electrical Energy, cilt.5, sa.1, ss.87-91, 2017 (Hakemli Dergi)
- XIX. **Artificial Neural Network Based Solution of Inverse and Forward Kinematics of Six - Axis Robotic Arm**  
NOĞAY H. S., AKINCI T. Ç., ŞEKER Ş. S.  
Industrial Technologies, cilt.14, sa.1, ss.7-12, 2017 (Hakemli Dergi)
- XX. **Laboratory ferroresonance measurements in power transformers**  
Pejić M., Tokić A., Kasumović M., Akıncı T. Ç.  
ELEKTROTEHNIŠKI VESTNIK-ELECTROCHEMICAL REVIEW, cilt.84, sa.4, ss.195-199, 2017 (ESCI)
- XXI. **Analysis of Sounds Generated from Welding Machine while in Idle and Operational Mode by Acoustic**  
GÜNAYDIN L., AKINCI T. Ç., KOÇYİĞİT G., GÖKMEN G., AKGÜN Ö.  
Applied Researches in Technics Technologies and Education - Journal of the Technics Technologies and Education Faculty of and Technologies, Trakia University, cilt.3, sa.3, ss.214-223, 2015 (Hakemli Dergi)

## **Kitap & Kitap Bölümleri**

- I. **Nature-Inspired Approach Using Seasonal Comparison of Wind Speed With Spectral and Statistical Analysis**  
Akıncı T. Ç., Çağlar R., Erdemir G., Zengin A. T., Şeker Ş. S.  
Applications of Nature-Inspired Computing in Renewable Energy Systems, Mellal Mohamed Arezki, Editör, IGI Global, Bumardas, ss.10-20, 2021

## **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. **Beyin Dalgası Sensörü Kontrolü ile Akıllı Ev Otomasyonu**  
Özen A., AKINCI T. Ç., TÜRKPENÇE D., ÇAĞLAR R., ŞEKER Ş. S.  
EEMKON 2019, ELEKTRİK ELEKTRONİK MÜHENDİSLİĞİ KONGRESİ, Türkiye, 14 - 16 Kasım 2019, ss.204-208
- II. **Evolution of entanglement in quantum neural network**

Korkmaz U., TÜRKPENÇE D., AKINCI T. Ç., ŞEKER Ş. S.

IOP Conference Series: Materials Science and Engineering, 16 - 18 Mayıs 2019, cilt.618, ss.12006

**III. A VIEW TO COGNITIVE ENGINEERING**

AKINCI T. Ç.

International Conference on Technics, Technologies and Education ICTTE 2019, 16 - 18 Ekim 2019

**IV. QUANTUM NEURAL NETWORKS DRIVEN BY INFORMATION RESERVOIR**

TÜRKPENÇE D., Korkmaz U., ÇAĞLAR R., AKINCI T. Ç., ŞEKER Ş. S.

The International Conference On New Approaches In Special Needs, 26 - 28 Nisan 2019, ss.224-231

**V. Analysis of wind effect on a PID controlled quadcopter for trajectory tracking task**

ERDEMİR G., AKINCI T. Ç., ZENGİN A. T., ŞEKER Ş. S.

OSTIV 2018 Meteorological Panel, Bremen, Almanya, 2 - 03 Şubat 2018

**VI. Time-Frequency Methods for Signal Analysis in Seasonal Wind Speed Data**

AKINCI T. Ç., ERDEMİR G., Salinus A., ŞEKER Ş. S.

OSTIV 2018 Meteorological Panel, Bremen, Almanya, 2 - 03 Şubat 2018

**VII. Steady coherence in quantum neural networks**

TÜRKPENÇE D., AKINCI T. Ç., ŞEKER Ş. S.

4th International Conference on pure and Applied Sciences: Renewable energies, 23 - 25 Kasım 2017

**VIII. Artificial Neural Network Based Solution Of Inverse And Forward Kinematics Of Six-axis Robotic Arm**

NOĞAY H. S., AKINCI T. Ç., ŞEKER Ş. S.

University Burgas, International Conference Education, Science, Economics And Technologies, 22 - 23 Haziran 2017

**IX. SEASONAL COMPARISONS FOR SPECTRAL ANALYSIS AND STATISTICAL DISTRIBUTIONS OF ANNUAL WIND DAT**

ÇAĞLAR R., ŞEKER Ş. S., Dikun J., AKINCI T. Ç., ÖNAL Ş. E., AYAZ E.

XXXIII OSTIV Congress, Benalla, Avustralya, 8 - 13 Ocak 2017

**X. Analysis of Light Levels in a Class in a day Using Wavelet Method International Conference on Engineering**

AKINCI T. Ç., SEVER Ü., GÜNAYDIN L., AYAZ E., ŞEKER Ş. S.

International Conference on Engineering, Technologies and Systems-TECHSYS 2015, 29 Nisan - 31 Mayıs 2015

**XI. Detection of the Deformations in Ceramic Plates with Coherence Analysis and Transfer Function Model**

AKINCI T. Ç., AYAZ E., ŞEKER Ş. S.

20th International Scientific Conference Mechanika, 23 - 24 Nisan 2015

**XII. SPECTRAL ANALYSIS FOR SIGNALS BASED ON FERRORESONANCE PHENOMENA IN ELECTRIC POWER SYSTEM**

AKINCI T. Ç., ŞEKER Ş. S., EKREN N.

International Conference Engineering, Technologies and SystemsTechSys 'xx2009, 29 - 30 Mayıs 2009

## Desteklenen Projeler

Akinci T. Ç., Yükseköğretim Kurumları Destekli Proje, Bispectrum and energy analysis of wind speed data, 2016 - 2018  
Akinci T. Ç., Yükseköğretim Kurumları Destekli Proje, Durum İzleme, Arıza Tespit Analizi ve İşaret İşleme Yöntemlerinde Yeni Yaklaşımlar, 2016 - 2018

## Bilimsel Dergilerdeki Faaliyetler

The Journal of Cognitive Systems, Editörler Kurulu Üyesi, 2016 - Devam Ediyor

Journal of Electrical Systems, Editörler Kurulu Üyesi, 2016 - Devam Ediyor

Energy, Özel Sayı Editörü, 2019 - 2020

Balkan Journal of Electrical and Computer Engineering, Özel Sayı Editörü, 2019 - 2020

## **Metrikler**

Yayın: 96

Atıf (WoS): 99

Atıf (Scopus): 254

H-İndeks (WoS): 6

H-İndeks (Scopus): 10

## **Kongre ve Sempozyum Katılımı Faaliyetleri**

Intern Conf Education Scie. Tech, Katılımcı, Burgas, Bulgaristan, 2017

TechSys 2017, Katılımcı, Plovdiv, Bulgaristan, 2017

OSITV CONGRESS, Katılımcı, Avustralya, 2017

ICCEE 2016, Katılımcı, Barcelona, İspanya, 2016

ICTTE 2016, Katılımcı, Jambol, Bulgaristan, 2016

RE & IT 2016, Katılımcı, Smoljan, Bulgaristan, 2016