

## Asst. Prof. ABDULKADİR ŞEKER



### Personal Information

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### International Researcher IDs

ScholarID: YjirUykAAAAJ

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Publons / Web Of Science ResearcherID: V-6493-2017

ScopusID: 57190735163

Yoksis Researcher ID: 110762



### Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Computer Engineering (PhD), Turkey 2016 - 2021

Postgraduate, Erciyes University, Fen Bilimleri Enstitüsü, Electrical and Computer Engineering, Turkey 2014 - 2016

Undergraduate, Karadeniz Technical University, Mühendislik Fakültesi, Computer Engineering, Turkey 2007 - 2012

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Proposing Metrics for Open Source Distributed Code Development Platforms, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, -, 2021

Postgraduate, Fabric Defect Detection Using Deep Learning Methods, Erciyes University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği (YI) (Tezli), 2016

### Research Areas

Artificial Intelligence, Computer Learning and Pattern Recognition, Natural Language Processing, Text/Document Processing, Pattern Recognition and Image Processing, Neural Networks, Software, Software Engineering

### Academic and Administrative Experience

Uygulama ve Araştırma Merkezi Yönetim Kurulu Üyesi, Sivas Cumhuriyet University, REKTÖRLÜK, Artificial Intelligence and Data Science Research and Application Center, 2022 - Continues

Erasmus Program Department Coordinator, Sivas Cumhuriyet University, Mühendislik Fakültesi, Bilgisayar Mühendisliği,

2022 - Continues

Assistant Manager of Research and Application Center, Sivas Cumhuriyet University, REKTÖRLÜK, Renewable Energy Research Center, 2020 - 2021

## Courses

### Postgraduate

Open Source Distributed Code Development Processes, Postgraduate, 2022 - 2023, 2021 - 2022

### Undergraduate

Software Engineering, Undergraduate, 2022 - 2023, 2021 - 2022

Object Oriented Programming, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021

Robot Programming, Undergraduate, 2022 - 2023, 2021 - 2022

Mobile Programming, Undergraduate, 2022 - 2023

## Jury Memberships

Post Graduate, Post Graduate, Sivas Cumhuriyet Üniversitesi, January, 2023

Doctoral Examination, Doctoral Examination, Yıldız Teknik Üniversitesi, May, 2022

## Research Infrastructure Information

Arslan H., Takcı H., Yüksek A. G., Delibaş E., İsmailoğlu F., Şeker A., Yeşilyurt S., Kurumsal Siber Güvenlik İhtiyaçlarına Yönelik Güvenlik Operasyonları Merkezi Gereksinimlerinin Analizi ve Değerlendirilmesi, December 2022

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

- I. **Determination of Photonuclear Reaction Cross-Sections on Stable P-shell Nuclei by Using Deep Neural Networks**  
AKKOYUN S., KAYA H., ŞEKER A., YEŞİLYURT S.  
Brazilian Journal of Physics, vol.53, no.4, 2023 (SCI-Expanded)
- II. **New Developer Metrics for Open Source Software Development Challenges: An Empirical Study of Project Recommendation Systems**  
Şeker A., Diri B., Arslan H.  
APPLIED SCIENCES-BASEL, vol.11, no.3, 2021 (SCI-Expanded)
- III. **A novel alignment-free DNA sequence similarity analysis approach based on top-k n-gram match-up**  
DELİBAŞ E., Arslan A., ŞEKER A., DİRİ B.  
Journal of Molecular Graphics and Modelling, vol.100, 2020 (SCI-Expanded)

## Articles Published in Other Journals

- I. **The Effect of the Coronavirus Pandemic on the Human Development Index of EU Countries: An Analysis Using Machine Learning Methods**  
KAHREMAN Y., ŞEKER A.  
Sivas Cumhuriyet Üniversitesi Mühendislik Fakültesi Dergisi, vol.2, no.2, pp.176-184, 2024 (Peer-Reviewed Journal)
- II. **A Systematic Literature Review on Custom NER with Evidence-Based Software Engineering**  
KEKÜL H., ŞEKER A.

- Sivas Cumhuriyet Üniversitesi Mühendislik Fakültesi Dergisi, vol.1, no.2, pp.75-81, 2023 (Peer-Reviewed Journal)
- III. **Classifying Release Notes Explanations using BERT: An Initial Step to Automatic Versioning in Distributed Software Development**  
ŞEKER A.  
Dicle Üniversitesi Mühendislik Fakültesi Mühendislik Dergisi, vol.14, no.4, pp.629-638, 2023 (Peer-Reviewed Journal)
- IV. **Verifying reports of collapsed buildings from twitter aftermaths of earthquakes: A case study from Turkey**  
ŞEKER A.  
Turkiye Coğrafi Bilgi Sistemleri Dergisi, 2023 (Peer-Reviewed Journal)
- V. **Open-Source Software Development Challenges: A Systematic Literature Review on GitHub**  
Şeker A., Diri B., Arslan H., Amasyalı M. F.  
International Journal of Open Source Software and Processes (IJOSSP), vol.11, no.4, pp.1-27, 2020 (Scopus)
- VI. **Summarising big data: public GitHub dataset for software engineering challenges**  
Şeker A., Diri B., Arslan H., Amasyalı M. F.  
Cumhuriyet Science Journal, vol.41, no.3, pp.720-724, 2020 (Peer-Reviewed Journal)
- VII. **DERİN ÖĞRENME YÖNTEMLERİ VE UYGULAMALARI HAKKINDA BİR İNCELEME**  
Şeker A., Diri B., Balık H. H.  
Gazi Mühendislik Bilimleri Dergisi, vol.3, no.3, pp.47-564, 2017 (Peer-Reviewed Journal)
- VIII. **Comparison of the Effects of Different Dimensional Reduction Algorithms on the Training Performance of Anfis (Adaptive Neuro-Fuzzy Inference System) Model**  
Yüksek A. G., Arslan H., Kaynar O., Delibaş E., Şeker A.  
Cumhuriyet Science Journal, vol.38, no.4, pp.716-730, 2017 (Peer-Reviewed Journal)
- IX. **Derin Öğrenme Yöntemleri ve Uygulamaları Hakkında Bir İnceleme**  
ŞEKER A., DİRİ B., BALIK H. H.  
Gazi Mühendislik Bilimleri Dergisi, vol.3, no.3, pp.47-64, 2017 (Peer-Reviewed Journal)
- X. **Stacked Autoencoder Method for Fabric Defect Detection.**  
Şeker A., Yüksek A. G.  
Cumhuriyet Science Journal, vol.38, no.2, pp.342-354, 2017 (Peer-Reviewed Journal)

## Books

- I. **GELENEKSEL ÇKKV YÖNTEMLERİNE ALTERNATİF YAPAY ZEKÂ TABANLI YAKLAŞIM: EKONOMİK PERFORMANS ÖRNEĞİ**  
ŞEKER A., KAHREMAN Y.  
in: YAPAY ZEKA: İŞSİZLİK VE İSTİHDAM ETKİSİ, KARAASLAN İLKNUR, ALTUNTEPE NİHAT, Editor, Gazi Kitapevi, Ankara, pp.91-110, 2024
- II. **Prediction of Development Types from Release Notes for Automatic Versioning of OSS Projects**  
Şeker A., Yeşilyurt S., Ardahan İ. C., Çınar B.  
in: Smart Applications with Advanced Machine Learning and Human-Centred Problem Design. ICAIAME 2021, D. Jude Hemanth, Utku Kose, Junzo Watada, Bogdan Patrut, Editor, Springer Nature, Zug, pp.399-407, 2023
- III. **Open Source Software Development Challenges: A Systematic Literature Review on GitHub**  
ŞEKER A., DİRİ B., ARSLAN H., AMASYALI M. F.  
in: Research Anthology on Agile Software, Software Development, and Testing, Khosrow-Pour Mehdi, Editor, IGI Global, pp.2134-2164, 2022

## Papers Published in Refereed Scientific Meetings

- I. **The Comparison of Original HDI and Simulated HDI of EU Countries: Measuring the Impact of COVID**

KAHREMAN Y., ŞEKER A.

INTERNATIONAL CUMHURİYET ARTIFICIAL INTELLIGENCE APPLICATIONS CONFERENCE, Sivas, Turkey, 21 November 2024, pp.23

- II. **ARTIFICIAL INTELLIGENCE IN MULTI-CRITERIA DECISION MAKING: A NOVEL APPROACH TO ECONOMIC PERFORMANCE EVALUATION**  
ŞEKER A., KAHREMAN Y.  
1 ST INTERNATIONAL WRITETEC CONGRESS OF SOCIAL SCIENCES AND HEALTH SCIENCES IN THE AGE OF ARTIFICIAL INTELLIGENCE, Antalya, Turkey, 25 November 2024, pp.59
- III. **Evaluation of Cappadocia Region in Terms of Big Data Based Revenue Management**  
DENİZ G., TOKER M., ÖZSOY A., ÖZTÜRK İ., YILMAZ N., YILDIRIM İ., ARDIÇ YETİŞ Ş., ŞEKER A.  
The Conference on Managing Tourism Across Continents, Ankara, Turkey, 30 April - 03 May 2024, pp.228-231
- IV. **Big Data-Driven Guest Experience Analysis: eDataLabHQ Case Study**  
DENİZ G., TOKER M., ÖZSOY A., ÖZTÜRK İ., YILMAZ N., YILDIRIM İ., ARDIÇ YETİŞ Ş., ŞEKER A.  
The Conference on Managing Tourism Across Continents, Ankara, Turkey, 30 April - 03 May 2024, pp.224-227
- V. **ARRHYTHMIA DETECTION USING TRANSFER LEARNING ON ECG IMAGES**  
YILDIZ Ö., ŞEKER A.  
ANKARA INTERNATIONAL CONGRESS ON SCIENTIFIC RESEARCH-X, Ankara, Turkey, 25 - 27 January 2024, pp.270-277
- VI. **LİTYUM İYON PİLERDE DEŞARJ SEVİYESİNE BAĞLI OLARAK YÜZEY SICAKLIK TAHMİNİNİN YAPILMASI**  
GÜVENDİ A., ŞEKER A., BİÇER E.  
5. INTERNATIONAL MEDITERRANEAN CONGRESS, Mersin, Turkey, 13 - 14 January 2024, pp.1387-1388
- VII. **Multi Purpose Security Analysis of Software Projects Against Cyber Threats and Development of Security Scoring Algorithms**  
ŞEKER A., ARSLAN H., DELİBAŞ E., Kekül H.  
2nd International Conference on Cyber Security and Digital Forensics (ICONSEC) 2022, Muğla, Turkey, 07 September 2022
- VIII. **Using Open Source Distributed Code Development Features on GitHub: A Real-World Example**  
Şeker A., Diri B., Arslan H.  
2nd International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2020), Gaziantep, Turkey, 7 - 09 October 2020, pp.518-525
- IX. **A Method Based on Word Frequency for Anomaly Event Detection on Social Network Streams**  
Şeker A., Diri B., Amasyalı M. F., Biricik G.  
2nd International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2020), Gaziantep, Turkey, 7 - 09 October 2020, pp.540-545
- X. **A new cloud service for interpreting taxi trajectories via crowdsensing approach**  
Şeker A., Güvensan M. A.  
2018 26th Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- XI. **Evaluation of Fabric Defect Detection Based on Transfer Learning with Pre-trained AlexNet**  
Şeker A.  
International Conference on Artificial Intelligence and Data Processing (IDAP), Malatya, Turkey, 28 - 30 September 2018
- XII. **Beden Eğitimi ve Spor Yüksekokulu Özel Yetenek Sınavı Verilerinin Veri Görselleştirme Yöntemiyle İncelenmesi: Cumhuriyet Üniversitesi Örneği**  
ARSLAN H., ŞEKER A., DELİBAŞ E., FİŞNE M., YÜKSEK A. G., GÜL M.  
International Educational Technology Symposium, Sivas, Turkey, 27 - 28 October 2017, pp.66-67
- XIII. **Analyzing The Exam Of Special Skills In Physical Education And Sport College Via Data Visualization Method: An Example Of Cumhuriyet University**  
Arslan H., Şeker A., Delibaş E., Fişne M., Yüksek A. G., Gül M.  
INTERNATIONAL EDUCATIONAL TECHNOLOGY SYMPOSIUM, Sivas, Turkey, 27 - 28 October 2017, vol.66

- XIV. **A New Feature Vector Model For Alignment-free Similarity Analysis of DNA Sequences**  
Delibaş E., Şeker A.  
2ND WORLD CONFERENCE ON TECHNOLOGY, INNOVATION AND ENTREPRENEURSHIP, İstanbul, Turkey, 12 - 14 May 2017, pp.46
- XV. **An Alignment-Free DNA Sequence Comparison Method based on N-Grams**  
Şeker A., Diri B., Delibaş E.  
2ND WORLD CONFERENCE ON TECHNOLOGY, INNOVATION AND ENTREPRENEURSHIP, İstanbul, Turkey, 12 - 14 May 2017, pp.45
- XVI. **DNA Sequence Compression within Traditional Text Compression Algorithms**  
ŞEKER A., DELİBAŞ E., DİRİ B.  
25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017
- XVII. **Educational Data Mining For Pre Detection Of Qualified Personnel**  
TAKCI H., ŞEKER A.  
International Conference on Computer Science and Engineering, Tekirdağ, Turkey, 20 October 2016 - 23 October 2016, pp.398-404
- XVIII. **Semi supervised Learning Based on Ensemble Algorithm**  
ŞEKER A., AMASYALI M. F.  
International Conference on Computer Science and Engineering, Tekirdağ, Turkey, 20 - 23 October 2016, pp.393-401
- XIX. **Kalifiye elemanın önceden tespiti için eğitim verisinin madenciliği**  
TAKCI H., ŞEKER A.  
Uluslararası Bilgisayar Mühendisliği Konferansı, 20 - 23 October 2016
- XX. **Examining the Relationships Between University Students' Course Achievements Using Association Analysis**  
Delibaş E., Şeker A.  
5th International Vocational Schools Symposium, Prizren, Kosovo, 18 - 20 May 2016, vol.2, pp.1045-1050
- XXI. **Fabric Defect Detection using Deep Learning**  
ŞEKER A., Peker K. A., YÜKSEK A. G., DELİBAŞ E.  
24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.1437-1440

## Supported Projects

- Delibaş E., Yeşilyurt S., Arslan H., Yüksek A. G., Akkoyun S., Şeker A., Adem K., Elik A. U., Project Supported by Higher Education Institutions, Otonom Araçlar İçin Sensör Füzyonu ve Yapay Zekâ Tabanlı Karar Verme Sistemlerinin Geliştirilmesi, 2025 - 2027
- Deniz G., Öztürk İ., Şeker A., Yetiş Ş. A., Yılmaz N., Yıldırım İ., Özsoy A., Toker M., Project Supported by Higher Education Institutions, eDataLabHQ.com, 2023 - 2026
- Delibaş E., Arslan H., Takcı H., Yüksek A. G., Yeşilyurt S., İsmailoğlu F., Şeker A., Project Supported by Higher Education Institutions, Kurumsal Siber Güvenlik İhtiyaçlarına Yönelik Güvenlik Operasyonları Merkezi Gereksinimlerinin Analizi ve Değerlendirilmesi, 2022 - 2024
- Yüksek A. G., Yalçın E., Delibaş E., Şeker A., Project Supported by Higher Education Institutions, Development of New Combining and Grouping Techniques in Group Recommender Systems, 2019 - 2020
- Boyraz T., Arslan H., ŞEKER A., Project Supported by Higher Education Institutions, Elektrostatik Eğirme Yöntemi ile Elde Edilen Nanolif TEM Görüntülerinin Makine Öğrenmesi Teknikleri Kullanılarak Karakterizasyonu, 2018 - 2019
- Diri B., Şeker A., Biricik G., Amasyalı M. F., Project Supported by Defense Industry, HAVADİS, 2018 - 2019
- Takcı H., Gürkahraman K., TUBITAK Project, Uygun bölüm seçimi için bölüm ve öğrenci arasında iki taraflı bir eşleşme sistemi tasarımı, 2016 - 2018
- Yüksek A. G., Şeker A., Project Supported by Higher Education Institutions, Derin Öğrenme Yaklaşımı ile Otomatik Kumaş Hata Tespiti Sistemi İçin Performansı ve Verimi Yüksek Algoritma Geliştirme, 2015 - 2016

Şeker A., Torun Y., EU Supported Other Project, Robot Laboratuvarlarının Kurulması ve Robot Eğitimi verilmesi TRH2 2  
IQVETII P 03 977, 2014 - 2015

## Activities in Scientific Journals

Sivas Cumhuriyet Üniversitesi Mühendislik Fakültesi Dergisi, Editor, 2023 - Continues

Sivas Cumhuriyet Üniversitesi Mühendislik Fakültesi Dergisi, Assistant Editor/Section Editor, 2022 - 2023

Cumhuriyet Science Journal, Foreign Language Redactor, 2018 - 2019

## Peer Reviews in Scientific Publications

BioMedInformatics, SCI Journal, December 2023

INFORMATION, SCI Journal, March 2023

APPLIED SCIENCES, SCI Journal, January 2023

Mathematics, SCI Journal, December 2022

ENTROPY, SCI Journal, September 2022

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, SCI Journal, September 2022

Software, SCI Journal, August 2022

electronics, SCI Journal, July 2022

Akıllı Sistemlerde Yenilikler ve Uygulamaları Konferansı, Conference Paper (Full Text), July 2022

The Journal of Engineering , Journal Indexed in ESCI, April 2021

The 2021 Mining Software Repositories Conference, Conference Paper (Full Text), January 2021

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, SCI Journal, August 2020

Fırat Üniversitesi Mühendislik Bilimleri Dergisi, Other Indexed Journal, July 2020

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, SCI Journal, April 2020

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, SCI Journal, March 2020

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, SCI Journal, January 2020

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, SCI Journal, January 2020

The Journal of Engineering, Journal Indexed in ESCI, January 2020

27. IEEE Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Conference Paper (Full Text), March 2019

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, SCI Journal, February 2019

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, SCI Journal, January 2018

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, SCI Journal, May 2017

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, SCI Journal, February 2017

## Scientific Project Refereeing

Priority R&D Project of Group C, March 2024

TUBITAK Project, 1501 - Industry R & D Projects Support Program, February 2024

Technopark, March 2023

Technopark, October 2022

Technopark, September 2022

Project Supported by Higher Education Institutions, BAP Research Project, August 2022

Technopark, May 2022

Technopark, April 2022

Technopark, January 2022

Technopark, December 2021

Technopark, August 2021

Technopark, January 2020  
Technopark, December 2018

## Scientific Consultations

Simzet Yazılım ve Otomasyon Teknolojileri Ltd.Şti., Project Consultancy, Sivas Cumhuriyet University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, Turkey, 2022 - 2023

## Tasks In Event Organizations

Delibaş E., Akkoyun S., Şeker A., Yüksek A. G., International Cumhuriyet Artificial Intelligence Applications Conference (CAIAC) 2024, Scientific Congress, Sivas, Turkey, Kasım 2024

Şeker A., Akıllı Sistemlerde Yenilikler ve Uygulamaları Konferansı, Scientific Congress, Sivas, Turkey, Ekim 2023

Şeker A., Akkoyun S., Delibaş E., Yüksek A. G., International Cumhuriyet Artificial Intelligence Applications Conference (CAIAC) 2022, Scientific Congress, Turkey, Aralık 2022

Akkoyun S., Şeker A., Delibaş E., Yeşilyurt S., International Cumhuriyet Artificial Intelligence Applications Conference (CAIAC) 2021, Scientific Congress, Sivas, Turkey, Eylül 2021

Ataseven H., Ünsal Çelimli D. B., Şeker A., 1.Enerji Günleri Sempozyumu, Scientific Congress, Sivas, Turkey, Haziran 2021

Takcı H., Delibaş E., Şeker A., 27th Signal Processing and Communications Applications Conference, Scientific Congress, Sivas, Turkey, Nisan 2019

## Mobility Activity

Erasmus Programme, Lecturing, Bakü Devlet Üniversitesi, Azerbaijan, 2022 - 2022

Erasmus Programme, Get Education, University "Ukshin Hoti" Prizren, Kosovo, 2022 - 2022

Erasmus Programme, Lecturing, Université Hassan II - Ain Chock, Morocco, 2021 - 2021

Erasmus Programme, Get Education, Yarmuk Üniversitesi, Jordan, 2019 - 2019

## Metrics

Publication: 40

Citation (WoS): 48

Citation (Scopus): 63

H-Index (WoS): 4

H-Index (Scopus): 4

## Invited Talks

Dağıtık Yazılım Geliştirme ve Bilgisayar Mühendisliğinde Trendler, Conference, Azerbaijan State University of Economics, Azerbaijan, November 2022

Bilgisayar Mühendisliği Öğrencileri için Doğru Kitap Seçimi ve Dijital Kaynakları Kullanma, Conference, Sivas Cumhuriyet Üniversitesi, Turkey, March 2022

## Entrepreneurship Activities

Anonymous, Moledro Yazılım Ticaret Sanayi Anonim Şirketi, 28 December 2023, Founder Owner

## **Non Academic Experience**

NETSİM YAZILIM, ArGe Mühendisi

Detay Bilgisayar, Bilgisayar Mühendisi