

## Asst. Prof. NESİBE YALÇIN

### Personal Information

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### International Researcher IDs

ScholarID: NvvI5NsAAAAJ

ORCID: 0000-0003-0324-9111

Publons / Web Of Science ResearcherID: A-2805-2016

ScopusID: 56511604200

Yoksis Researcher ID: 31133

### Education Information

Doctorate, Sakarya University, Institute Of Science, Computer and Information Engineering, Turkey 2012 - 2017

Postgraduate, Selcuk University, Institute Of Science, Computer Engineering, Turkey 2009 - 2012

Undergraduate, Selcuk University, Faculty Of Engineering-Architecture, Computer Engineering, Turkey 2005 - 2009

### Research Areas

Computer Sciences

### Academic Titles / Tasks

Assistant Professor, Erciyes University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2021 - Continues

Assistant Professor, Bartin University, Faculty Of Engineering, Department Of Computer Engineering, 2018 - 2021

Research Assistant, Bilecik Seyh Edebali University, Faculty Of Engineering, Department Of Computer Engineering, 2011 - 2017

### Academic and Administrative Experience

Deputy Head of Department, Bartin University, Faculty Of Engineering, Department Of Computer Engineering, 2020 - 2021

Head of Department, Bartin University, Faculty Of Engineering, Department Of Computer Engineering, 2018 - 2021

Deputy Head of Department, Bartin University, Faculty Of Engineering, Department Of Computer Engineering, 2018 - 2020

### Courses

Numerical Methods, Undergraduate, 2021 - 2022

Internet of Things Security, Postgraduate, 2022 - 2023

Numerical Methods, Undergraduate, 2021 - 2022

Tez Danışmanlığı 2, Postgraduate, 2021 - 2022  
Uzmanlık Alan Dersi 1, Postgraduate, 2022 - 2023  
Tez Çalışması 1, Postgraduate, 2022 - 2023  
Thesis Consultancy 1, Postgraduate, 2021 - 2022  
Information Security, Undergraduate, 2021 - 2022  
Bitirme Ödevi, Undergraduate, 2021 - 2022  
Seminar, Postgraduate, 2021 - 2022  
Machine Learning, Postgraduate, 2021 - 2022  
Information Security, Undergraduate, 2021 - 2022

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

- I. **An IoT-based Smart Home Application with Barrier-Free Stairs for Disabled/Elderly People**  
Unaldi S., Yalcin N., Elci E.  
ELEKTRONIKA IR ELEKTROTEHNIKA, vol.29, no.1, pp.15-20, 2023 (SCI-Expanded)
- II. **Investigation of indoor air quality in university libraries in terms of gaseous and particulate pollutants in Bartın, Turkey**  
Güneş G., YALÇIN N., Çolaklar H.  
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.194, no.3, 2022 (SCI-Expanded)
- III. **RPL Attack Detection and Prevention in the Internet of Things Networks Using a GRU Based Deep Learning**  
Cakir S., Toklu S., Yalcin N.  
IEEE ACCESS, vol.8, pp.183678-183689, 2020 (SCI-Expanded)
- IV. **A modeling and simulation study about CO2 amount with web-based indoor air quality monitoring**  
Yalcin N., Balta D., Ozmen A.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.26, no.3, pp.1390-1403, 2018 (SCI-Expanded)
- V. **Epilepsy diagnosis using artificial neural network learned by PSO**  
Yalcin N., Tezel G., Karakuzu C.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.23, no.2, pp.421-432, 2015 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Topluluk Öğrenmesi Algoritmaları Kullanarak Amazon Yemek Yorumları Üzerine Duygu Analizi**  
Bozkurt A. H., Yalçın N.  
Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi, vol.11, no.1, pp.128-139, 2024 (Peer-Reviewed Journal)
- II. **Transfer Öğrenme Teknikleri Kullanarak Nohut Çeşidi Sınıflandırma**  
Kılıç İ., Yalçın N.  
Karaelmas Fen ve Mühendislik Dergisi, vol.14, no.1, pp.48-58, 2024 (Peer-Reviewed Journal)
- III. **Kriptografi ve Görüntü Steganografi Tabanlı Bir Veri Gizleme Uygulaması: Sten 0.1**  
Çelik S., YALÇIN N.  
Bilgisayar Bilimleri ve Teknolojileri Dergisi, vol.4, no.2, pp.56-66, 2023 (Peer-Reviewed Journal)
- IV. **Symptom Based COVID-19 Prediction Using Machine Learning and Deep Learning Algorithms**  
Yalçın N., Ünalı S.  
Journal of Emerging Computer Technologies, vol.2, no.1, pp.22-29, 2022 (Peer-Reviewed Journal)
- V. **Hava Kirliliğinin Makine Öğrenmesi Tabanlı Tahmini: Başakşehir Örneği**  
Ünalı S., Yalçın N.  
Mühendislik Bilimleri ve Araştırmaları Dergisi, vol.4, no.1, pp.35-44, 2022 (Peer-Reviewed Journal)

- VI. **Detection of DIS Flooding Attacks in IoT Networks Using Machine Learning Methods**  
Çakır S., Yalçın N.  
Avrupa Bilim ve Teknoloji Dergisi, no.28, pp.1317-1320, 2021 (Peer-Reviewed Journal)
- VII. **Nesnelerin İnternetinde Sahte Kimlik Saldırılarının Makine Öğrenme Yöntemleri ile Tespiti**  
ÇAKIR S., YALÇIN N., TOKLU S.  
Avrupa Bilim ve Teknoloji Dergisi, no.19, pp.530-536, 2020 (Peer-Reviewed Journal)
- VIII. **IoT Tabanlı Platform ile Gerçek Zamanlı İç Ortam Hava Kalitesi İzleme Sistemi**  
ÜÇGÜN H., GÖMBECİ F., YÜZGEÇ U., YALÇIN N.  
Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi, vol.7, no.1, pp.370-381, 2020 (Peer-Reviewed Journal)
- IX. **Comparison of optimization methods based on GSA**  
KAZAK ÇERÇEVİK N., YALÇIN N., ÇERÇEVİK A. E.  
International Journal of Applied Mathematics Electronics and Computers, pp.47-50, 2017 (Peer-Reviewed Journal)
- X. **The Future of 3 Molecular Structures in The Medical**  
YALÇIN N., ÇOBAN BUDAK E., ARI S.  
AJIT-e: Online Academic Journal of Information Technology, vol.4, no.12, pp.61-70, 2013 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Kablosuz İletişim Teknolojilerinde Siber Risk Unsurları**  
ÇAKIR S., YALÇIN N.  
in: MÜHENDİSLİKTE İLERİ VE ÇAĞDAŞ ÇALIŞMALAR 2, YALILI KILIÇ, Melike; KILIÇ, İlker, Editor, Duvar Yayınları, İzmir, pp.271-286, 2023
- II. **SİBER GÜVENLİK VE DOS SALDIRILARI**  
Çakır S., Yalçın N.  
in: Mühendislik Bilimleri Alanında Yeni Trendler, KILIÇ Birol, BAŞYİĞİT KILIÇ Gülden, Editor, Duvar Yayınları, İzmir, pp.631-646, 2022
- III. **GRANİT PLAKALARININ EVRİŞİMLİ SINİR AĞLARI İLE SINIFLANDIRILMASI**  
Ziyalı F., YALÇIN N., ÜNALDI S.  
in: Mühendislik Alanında Uluslararası Araştırmalar - II, Özalp Coşkun, Hürdoğan Ertaç, Editor, Serüven Yayınevi, İzmir, pp.31-41, 2022
- IV. **Online Monitoring of Indoor Air Quality and Thermal Comfort Using a Distributed Sensor-Based Fuzzy Decision Tree Model**  
Balta D., Yalçın N., Balta M., Özmen A.  
in: Integrating IoT and AI for Indoor Air Quality Assessment, Saini, Jagriti; Dutta, Maitreyee; Marques, Gonçalo; Halgamuge, Malka N., Editor, Springer International Publishing, pp.111-134, 2022
- V. **A Performance Comparison of Neural EEG Signal Classifiers Based on Extreme Learning Machine and Heuristic Optimization Algorithms**  
YALÇIN N., KARAKUZU C.  
in: CURRENT ACADEMIC STUDIES IN ENGINEERING SCIENCES-2018, Prof. Dr. Serdar SALMAN Doç. Dr. Duygu KAVAK Dr. Ali KILIÇER, Editor, IVPE, Cetinje, pp.53-60, 2018

## Refereed Congress / Symposium Publications in Proceedings

- I. **Cyber-attack detection using various recurrent neural networks**  
Yalçın N., Çakır S., Ünalı S.  
Karaelmas International Science and Engineering Symposium (KISES 2024), Zonguldak, Turkey, 10 - 11 May 2024, pp.47
- II. **MQTT Protokolü Tabanlı IoT Sistemine Yönelik Saldırı Uygulaması ve Güvenlik Önlemleri**  
Çelik S., YALÇIN N., ÇAKIR S.

- III. International Artificial Intelligence And Data Science Congress (ICADA'23), İzmir, Turkey, 28 July 2023, pp.25
- III. **Web Kazıma ve Makine Öğrenme Yöntemleri ile Duygu Analizi**  
Bozkurt A. H., YALÇIN N.  
III. International Artificial Intelligence And Data Science Congress (ICADA'23), İzmir, Turkey, 28 July 2023, pp.13
- IV. **Classification of Chickpea Varieties Based on Convolutional Neural Networks Evrışimsel Sinir Agları Tabanlı Nohut eşitleri Sınıflandırması**  
Kilic I., YALÇIN N.  
2023 Innovations in Intelligent Systems and Applications Conference, ASYU 2023, Sivas, Turkey, 11 - 13 October 2023
- V. **Classification of Granite Types with Convolutional Neural Networks**  
Ziyahı F., Yalçın N., Ünalđı S.  
4 TH INTERNATIONAL CONFERENCE ON APPLIED ENGINEERING AND NATURAL SCIENCES (ICAENS 2022), Konya, Turkey, 10 November 2022
- VI. **Bulut Tabanlı Bir Mesajlaşma Uygulaması Tasarımı ve Gerçekleřtirmesi**  
Çelik C., ÇAKIR S., YALÇIN N.  
3rd International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 20 July 2022, pp.975-979
- VII. **Detection of DIS Flooding Attacks in IoT Networks Using Machine Learning Methods**  
Çakır S., Yalçın N.  
1st International Conference on Applied Engineering and Natural Sciences ICAENS 2021, Konya, Turkey, 1 - 03 November 2021
- VIII. **Internet of Things based Smart Home System Design for Individuals with Disabilities**  
Elçi E., YALÇIN N., ÜNALDI S.  
2021 6th International Conference on Computer Science and Engineering (UBMK), Ankara, Turkey, 15 - 17 September 2021, pp.619-622
- IX. **Nesnelerin İnternetinde Sahte Kimlik Saldırılarının Makine Öğrenme Yöntemleri ile Tespiti**  
ÇAKIR S., YALÇIN N., TOKLU S.  
1st International Conference on Computer, Electrical and Electronic Sciences, Konya, Turkey, 8 - 10 October 2020
- X. **Predicting Properties of Interlock Knitted Fabrics Produced from Siro-Spun Yarns by Using Fiber Properties and Artificial Neural Network**  
ÜZÜMCÜ M. B., BEDEZ ÜTE T., YALÇIN N., KADOĞLU H.  
3rd International Zeugma Conference on Scientific Researches, Gaziantep, Turkey, 22 - 24 November 2019, pp.376-387
- XI. **Aşırı Öğrenme Makinesi ve Sezgisel Optimizasyon Algoritmalarına Dayalı Sinirsel EEG Sinyal Sinyal Sınıflandırıcıların Bir Başarım Karşılaştırması**  
Yalçın N., Karakuzu C.  
5th INTERNATIONAL SYMPOSIUM ON MULTIDISCIPLINARY STUDIES, Ankara, Turkey, 16 - 17 November 2018, pp.259
- XII. **Indoor Air Quality Monitoring System Using Raspberry Pi for Energy Efficiency in Classrooms**  
BALTA D., YALÇIN N., ÖZMEN A.  
III INTERNATIONAL CONFERENCE ON ENGINEERING AND NATURAL SCIENCES (ICENS 2017), 3 - 07 May 2017, pp.252-256
- XIII. **Comparison of Optimization Methods Based on GSA**  
KAZAK N., YALÇIN N., ÇERÇEVİK A. E.  
5th International Conference on Technology and Sciences (ICAT'xx17), İstanbul, Turkey, 9 - 12 May 2017, pp.304-308
- XIV. **Particles Behaviour Analysis in Particle Swarm Optimization**  
KAZAK N., YALÇIN N.  
2nd International Conference on Engineering and Natural Sciences (ICENS 2016), Saraybosna, Bosnia And Herzegovina, 24 - 28 May 2016, pp.2212-2217
- XV. **IAQ Modeling and Estimating for a Meeting Room**

YALÇIN N., BALTA D., ÖZMEN A.

2nd International Conference on Engineering and Natural Sciences (ICENS 2016), Saraybosna, Bosnia And Herzegovina, 24 - 28 May 2016, pp.1075-1080

**XVI. A Simulation Study About Online IAQ Monitoring**

YALÇIN N., DURAL D., ÖZMEN A.

COST Action TD1105 - New Sensing Technologies for Indoor Air Quality Monitoring: Trends and Challenges – Fifth Scientific Meeting, Sofija, Bulgaria, 16 - 18 December 2015

**XVII. The Use of Mass Balance Based Model for Indoor Air Pollutant Concentration Modeling**

YALÇIN N., ÖZMEN A., DURAL D.

3rd International Symposium on Innovative Technologies in Engineering and Science (ISITES 2015), Valencia, Spain, 3 - 05 June 2015, pp.716-725

**XVIII. MPI Based Simulator Studyf Indoor Air Quality Monitoring**

DURAL D., ÖZMEN A., YALÇIN N.

3rd International Symposium on Innovative Technologies in Engineering and Science (ISITES 2015), Valencia, Spain, 3 - 05 June 2015, pp.406-415

**XIX. Indoor Modelling and Simulator Development for Measurement Systems and Gas Sensors**

YALÇIN N., ÖZMEN A.

COST Action TD1105 - New Sensing Technologies for Air-Pollution Control and Environmental Sustainability - Third Scientific Meeting, İstanbul, Turkey, 3 - 05 December 2014

**XX. Nazaroff Cass Modeli Kullanarak İç Ortam Gaz Kirletici Konsantrasyonunun Tahmini**

YALÇIN N., ÖZMEN A.

ELECO '2014 Elektrik, Elektronik, Bilgisayar ve Biyomedikal Mühendisliği Sempozyumu ve Sergisi, Bursa, Turkey, 27 - 29 November 2014, pp.785-788

**XXI. Prediction of Indoor Air Pollutant Concentrations Using Nazaroff Cass Model**

YALÇIN N., ÖZMEN A.

2nd International Symposium on Innovative Technologies in Engineering and Science (ISITES 2014), Karabük, Turkey, 18 - 20 June 2014, pp.1289-1297

**XXII. Apriori Algoritması ile Teknik Seçmeli Ders Seçim Analizi**

YALÇIN N., GÜNGÖR E., YURTAY N.

UZEM 2013 Ulusal Uzaktan Eğitim ve Teknolojileri Sempozyumu, Konya, Turkey, 1 - 03 November 2013, pp.122-127

**XXIII. Epilepsy Diagnosis Using PSO based ANN**

Yalcin N., Karakuzu C., Tezel G.

18th International Symposium on Artificial Life and Robotics (AROB), Daejeon, South Korea, 30 January - 01 February 2013, pp.460-463

**XXIV. Yerçekimsel Arama Algoritması ile PID Denetleç Parametrelerinin Tespiti PID Controller Parameters Optimization Using Gravitational Search Algorithm**

YALÇIN N., ÇAKIR S., KESLER M., KAZAK N.

ELECO '2012 Elektrik - Elektronik ve Bilgisayar Mühendisliği Sempozyumu, Bursa, Turkey, 29 November - 01 December 2012, pp.725-729

**XXV. Epilepsy Diagnosis Using Artificial Neural Network Learned by PSO**

Yalcin N., Tezel G., Karakuzu C.

9th International Conference on Electronics Computer and Computation (ICECCO 2012), Ankara, Turkey, 1 - 03 November 2012, pp.37-40

## Supported Projects

YALÇIN N., UYGUR M. F., Project Supported by Higher Education Institutions, Javascript Çerçevelerinin Performans Değerlendirmesi, 2023 - Continues

Yalçın N., Balbay Ş., Project Supported by Higher Education Institutions, Tarımsal Atıkların Akustik Emici Olarak

Değerlendirilmesi Ve Ses Emme Katsayılarının Gerçek Zamanlı İzlenmesi, 2021 - 2023

Yalçın N., Project Supported by Higher Education Institutions, Bartın Üniversitesi Kütüphanelerinde İç Ortam Hava Kalitesinin Araştırılması Proje No:2019-FEN-A-018, 2019 - 2021

Yalçın N., Çalışkan Değirmenci Ö., TUBITAK Project, Mühendislik Bilim Okulu, 2012 - 2013

## **Scientific Refereeing**

Sakarya University Journal of Computer and Information Sciences (Online), Other Indexed Journal, January 2023

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, Journal Indexed in SCI-E, February 2022

SOFT COMPUTING, Journal Indexed in SCI-E, November 2021

Journal of Engineering and Architecture Faculty of Eskisehir Osmangazi University, Other Indexed Journal, August 2021

BIOMEDICAL SIGNAL PROCESSING AND CONTROL, SCI Journal, June 2021

BSEU JOURNAL OF ENGINEERING RESEARCH AND TECHNOLOGY, Other Indexed Journal, May 2021

IEEE ACCESS, SCI Journal, April 2021

## **Metrics**

Publication: 46

Citation (WoS): 84

Citation (Scopus): 112

H-Index (WoS): 4

H-Index (Scopus): 4

## **Non Academic Experience**

Belya A.Ş.

Selçuk Üniversitesi