



Burak KOLUKISA

ID: 10799655428 | **Date of birth:** 04/05/1993 | **Place of birth:** Isparta, Türkiye |

Nationality: Turkish | **Gender:** Male | **Phone number:** (+90) 5393903393 (Mobile) |

Email address: burakkolukisa@outlook.com | **Address:** 38080, Kayseri, Türkiye (Home)

ABOUT ME

Burak Kolukisa

Burak Kolukisa received his Bachelor's degree in Computer Engineering from Erciyes University in Kayseri in 2016, and his Master's degree in Electrical and Computer Engineering from Abdullah Gül University in Kayseri in 2020. He received his PhD degree in Electrical and Computer Engineering from Abdullah Gül University in 2024. Currently, he is working as an Assistant Professor in the Department of Software Engineering at Kayseri University. His research focuses on Data Mining, Machine Learning, Deep Learning, Bioinformatics and the Internet of Things

WORK EXPERIENCE

ABDULLAH GÜL UNIVERSITY – KAYSERİ, TÜRKİYE

RESEARCH ASSISTANT – 2018 – 02/2025

MEKOSAN MAKİNA – KAYSERİ, TÜRKİYE

R&D ENGINEER – 2016 – 2018

KAYSERİ ÜNİVERSİTESİ – KAYSERİ, TÜRKİYE

SOFTWARE ENGINEER – 02/2025 – CURRENT

EDUCATION AND TRAINING

2020 – 2024 Kayseri, Türkiye

PH.D. Abdullah Gül University

Website <https://www.agu.edu.tr> | **Field of study** Electrical and Computer Engineering | **Final grade** 4 | **Level in EQF** EQF level 8 |

Thesis Machine learning approaches for internet of things based vehicle type classification and network anomaly detection

2018 – 2020 Kayseri, Türkiye

MASTER Abdullah Gül University

Website <https://www.agu.edu.tr> | **Field of study** Electrical and Computer Engineering | **Final grade** 3.63 |

Level in EQF EQF level 7 |

Thesis Development of data mining methodologies and machine learning models to understand cardiovascular disease mechanisms

2011 – 2016 Kayseri, Türkiye

BACHELOR OF SCIENCE Erciyes University <https://www.erciyes.edu.tr>

Website <https://www.erciyes.edu.tr> | **Field of study** Computer Engineering | **Final grade** 3.26 | **Level in EQF** EQF level 6

SKILLS

Data Mining | Machine Learning | Deep Learning | Internet of Things | Bioinformatics | Swarm Intelligence

PUBLICATIONS

2024

[Defect classification of composite materials using transfer learning methods](#)

Gulsen, A., Kolukisa, B., Ozdemir, A. T., Bakir-Gungor, B., Gungor, V. C. (2024). Defect classification of composite materials using transfer learning methods. Nondestructive Testing and Evaluation, 1-17.

Authors: A. Gulsen, B. Kolukisa, A. T. Ozdemir, B. Bakir-Gungor, V. C. Gungor | **Journal Name:** Nondestructive Testing and Evaluation | **Publisher:** Taylor & Francis

2024

[An Efficient Network Intrusion Detection Approach Based on Logistic Regression Model and Parallel Artificial Bee Colony Algorithm](#)

Kolukisa, B., Dedetürk, B. K., Hacilar, H., Gungor, V. C. (2024). An Efficient Network Intrusion Detection Approach Based on Logistic Regression Model and Parallel Artificial Bee Colony Algorithm. Computer Standards & Interfaces, 89, 103808.

Authors: B. Kolukisa, B. K. Dedetürk, H. Hacilar, V. C. Gungor | **Journal Name:** Computer Standards & Interfaces | **Volume, Issue and Pages:** Vol. 89 | **Publisher:** Elsevier

2024

[Ensemble Supervised Feature Selection for Clustering Damage Modes in CFRP Sandwich Composites Using Acoustic Emission](#)

Gulsen, A., Kolukisa, B., Caliskan, U., Bakir-Gungor, B., Gungor, V. C. (2024). Ensemble Supervised Feature Selection for Clustering Damage Modes in CFRP Sandwich Composites Using Acoustic Emission. Advanced Engineering Materials.

Authors: A. Gulsen, B. Kolukisa, U. Caliskan, B. Bakir-Gungor, V. C. Gungor | **Journal Name:** Advanced Engineering Materials | **Publisher:** Wiley

2023

[Ensemble feature selection and classification methods for machine learning-based coronary artery disease diagnosis](#)

Kolukisa, B., Bakir-Gungor, B. (2023). Ensemble feature selection and classification methods for machine learning-based coronary artery disease diagnosis. Computer Standards & Interfaces, 84, 103706.

Authors: B. Kolukisa, B. Bakir-Gungor | **Journal Name:** Computer Standards & Interfaces | **Volume, Issue and Pages:** Vol. 84 | **Publisher:** Elsevier

2023

[A deep neural network approach with hyper-parameter optimization for vehicle type classification using 3-D magnetic sensor](#)

Kolukisa, B., Yildirim, V. C., Ayyildiz, C., Gungor, V. C. (2023). A deep neural network approach with hyper-parameter optimization for vehicle type classification using 3-D magnetic sensor. Computer Standards & Interfaces, 84, 103703.

Authors: B. Kolukisa, V. C. Yildirim, C. Ayyildiz, V. C. Gungor | **Journal Name:** Computer Standards & Interfaces | **Volume, Issue and Pages:** Vol. 84 | **Publisher:** Elsevier

2022

[Deep learning approaches for vehicle type classification with 3-D magnetic sensor](#)

Kolukisa, B., Yildirim, V. C., Elmas, B., Ayyildiz, C., Gungor, V. C. (2022). Deep learning approaches for vehicle type classification with 3-D magnetic sensor. Computer Networks, 217, 109326.

Authors: B. Kolukisa, V.C. Yildirim, B. Elmas, C. Ayyildiz, V. C. Gungor | **Journal Name:** Computer Networks | **Volume, Issue and Pages:** Vol. 217 | **Publisher:** Elsevier

2020

[Coronary artery disease diagnosis using optimized adaptive ensemble machine learning algorithm](#)

Kolukisa, B., Yavuz, L., Soran, A., Bakir-Gungor, B., Tuncer, D., Onen, A., Gungor, V.C. (2020). TITLE ABOVE . International Journal of Bioscience, Biochemistry and Bioinformatics, 10(1), 58–65.

Authors: B. Kolukisa, L. Yavuz, A. Soran, B. Bakir-Gungor, D. Tuncer, A. Onen, V.C. Gungor | **Journal Name:** International Journal of Bioscience, Biochemistry and Bioinformatics | **Volume, Issue and Pages:** Vol. 10(1), pp. 58–65 | **Publisher:** IJBBB

2019

Diagnosis of coronary heart disease via classification algorithms and a new feature selection methodology

Kolukisa, B., Hacilar, H., Kuş, M., Bakir-Gungor, B., Aral, A., Gungor, V. C. (2019). Diagnosis of coronary heart disease via classification algorithms and a new feature selection methodology. International Journal of Data Mining Science, 1(1), 8-15

Authors: B. Kolukisa, H. Hacilar, M. Kuş, B. Bakir-Gungor, A. Aral, V. C. Gungor | **Journal Name:** International Journal of Data Mining Science | **Volume, Issue and Pages:** Vol. 1(1), pp. 8-15 | **Publisher:** IACSIT

2023

[A Transfer Learning Approach for Skin Cancer Subtype Detection](#)

Kolukisa, B., Görmez, Y., Aydın, Z. (2022). TITLE ABOVE. In 4th International Conference on Artificial Intelligence and Applied Mathematics in Engineering: ICAIAME 2022. Cham: Springer International Publishing.

Authors: B. Kolukisa, Y. Görmez, Z. Aydın | **Journal Name:** 4th International Conference on Artificial Intelligence and Applied Mathematics in Engineering | **Publisher:** Springer International Publishing

2019

[Weighted Association Rules and Scoring Methodology for Cardiovascular Diseases](#)

Goy, G., Kolukisa, B., Bakir-Gungor, B., Ugur, I., Gungor, V. C. (2019). Weighted Association Rules and Scoring Methodology for Cardiovascular Diseases. International Journal of Data Mining Science.

Authors: G. Goy, B. Kolukisa, B. Bakir-Gungor, I. Ugur, V. C. Gungor | **Journal Name:** International Journal of Bioscience, Biochemistry and Bioinformatics | **Publisher:** IJBBB

2024

[Evaluating the Impact of Sentiment Analysis on Deep Reinforcement Learning-Based Trading Strategies](#)

Etil, M., Kolukisa, B., Bakir-Gungor, B. (2024). Evaluating the Impact of Sentiment Analysis on Deep Reinforcement Learning-Based Trading Strategies. 9th International Conference on Computer Science and Engineering (UBMK-2024).

Authors: M. Etil, B. Kolukisa, B. Bakir-Gungor | **Journal Name:** 9th International Conference on Computer Science and Engineering (UBMK-2024) | **Publisher:** IEEE

2024

[A Federated Learning Framework for Classifying the Images in Ultrasonic Nondestructive Testing](#)

Gulsen, A., Hacilar, H., Kolukisa, B., Bakir-Gungor, B. (2024). A Federated Learning Framework for Classifying the Images in Ultrasonic Nondestructive Testing. 9th International Conference on Computer Science and Engineering (UBMK-2024).

Authors: A. Gulsen, H. Hacilar, B. Kolukisa, B. Bakir-Gungor | **Journal Name:** 9th International Conference on Computer Science and Engineering (UBMK-2024) | **Publisher:** IEEE

2024

[ATGRUVAE: Reducing Noise and Improving Forecasting Performance in Stock Data](#)

Akkas, H., Kolukisa, B., Bakir-Gungor, B. (2024). ATGRUVAE: Reducing Noise and Improving Forecasting Performance in Stock Data. 9th International Conference on Computer Science and Engineering (UBMK-2024).

Authors: H. Akkas, B. Kolukisa, B. Bakir-Gungor | **Journal Name:** 9th International Conference on Computer Science and Engineering (UBMK-2024) | **Publisher:** IEEE

2021

[A Comparative Analysis on Medical Article Classification Using Text Mining & Machine Learning Algorithms](#)

Kolukisa, B., Dedetürk, B. K., Dedetürk, B. A., Gulsen, A., Bakal, G. (2021). TITLE ABOVE . VI. International Conference on Computer Science and Engineering (UBMK-2021).

Authors: B. Kolukisa, B. K. Dedetürk, B. A. Dedetürk, A. Gulsen, G. Bakal | **Journal Name:** VI. International Conference on Computer Science and Engineering (UBMK-2021) | **Publisher:** IEEE

2020

An Ensemble Feature Selection Methodology That Incorporates Domain Knowledge for Cardiovascular Disease Diagnosis

Kolukisa, B., Gungor, V. C., Bakir-Gungor, B. (2020). An Ensemble Feature Selection Methodology That Incorporates Domain Knowledge for Cardiovascular Disease Diagnosis. 28th Signal Processing and Communications Applications Conference (SIU-2020).

Authors: B. Kolukisa, V. C. Gungor, B. Bakir-Gungor | **Journal Name:** 28th Signal Processing and Communications Applications Conference (SIU-2020) | **Publisher:** IEEE

2020

Ensemble churn prediction for internet service provider with machine learning techniques

Goy, G., Kolukisa, B., Bahcevan, C., Gungor, V. C. (2020). Ensemble churn prediction for internet service provider with machine learning techniques. V. International Conference on Computer Science and Engineering (UBMK-2020).

Authors: G. Goy, B. Kolukisa, C. Bahcevan, V. C. Gungor | **Journal Name:** V. International Conference on Computer Science and Engineering (UBMK-2020) | **Publisher:** IEEE

2018

Evaluation of classification algorithms, linear discriminant analysis and a new hybrid feature selection methodology for the diagnosis of coronary artery disease

Kolukisa, B., Hacilar, H., Goy, G., Kus, M., Bakir-Gungor, B., Aral, A., Gungor, V. C. (2018). TITLE IS GIVEN ABOVE . IEEE International Conference on Big Data (BIG DATA-2018).

Authors: B. Kolukisa, H. Hacilar, G. Goy, M. Kus, B. Bakir-Gungor, A. Aral, V. C. Gungor | **Journal Name:** IEEE International Conference on Big Data (BIG DATA-2018) | **Publisher:** IEEE

● PROJECTS

01/07/2023 – 30/06/2026

SOSYAL MEDYA, HABER, TEMEL VE TEKNİK ANALİZLERİ DİKKATE ALAN MAKİNE ÖĞRENMESİ TEMELLİ HİSSE SENEDİ YATIRIM TAVSİYE PLATFORMU

The project aims to develop a stock investment advisory platform that utilizes machine learning algorithms by analyzing social media trends, news articles, and technical indicators. Responsibilities include designing data pipelines, implementing ML models for sentiment and trend analysis, and optimizing recommendation algorithms. The project is supported by TÜBİTAK TEYDEB (1501) with Project Code: 3230482.

01/01/2024 – 30/06/2024

TRİAGAI: SAĞLIK EKOSİSTEMİ İÇİN AKILLI İŞ AKIŞ YÖNETİMİ PLATFORMU

Development of an intelligent workflow management platform for the healthcare ecosystem. Responsibilities include designing ML-based decision support systems and integrating data mining methodologies for process optimization. Supported by TÜBİTAK (1512), Project Code: 2230333.

01/01/2024 – 31/12/2024

ÇEVRESEL, SOSYAL VE YÖNETİŞİM ETKİLERİNİN ÖLÇÜLMESİ VE İYİLEŞTİRİLMESİ İÇİN VERİ MADENCİLİĞİ DESTEKLİ PLATFORM

A data mining-supported platform aiming to measure and enhance Environmental, Social, and Governance impacts. Responsibilities include developing data processing workflows and analytical models. Supported by TÜBİTAK (1512), Project Code: 2230257.

01/02/2023 – 02/01/2024

GEAKDES: Gerçek Zamanlı Deprem Afet / Süreç Yönetimi İçin Yapay Zekâ Temelli Akıllı Karar Destek Sistemi

Design and implementation of a real-time AI-based decision support system for earthquake disaster and process management. Duties include machine learning model development, data integration, and optimization of predictive analytics. Supported by TÜBİTAK (1001), Project Code: 121E406.

01/10/2018 – 30/06/2020

Elektrookülogram Tabanlı Kontrol Cihazı

Development of an electrooculogram (EOG)-based control device for assistive technology applications. Involved in signal processing algorithm development and system integration. Supported by TÜBİTAK (1512), Project Code: 2180204.

● COURSES GIVEN AS RESEARCH ASSISTANT

Art of Computing

Exploring Computer Engineering

Object Oriented Programming

Mobile Programing

Data Structures and Algorithms

Analysis of Algorithms

Mathematical Modeling and Algorithmic Thinking

Computer Networks

Communication Networks

Embedded Systems

Machine Learning with Python
