



CURRICULUM VITAE

Name and Surname: Özgür Koray ŞAHİNGÖZ
Date of Birth: 1973
Academic Title: Professor Dr.
Work Address:
Email: osahingoz@biruni.edu.tr
Foreign Languages Known (Score and Year): English, C2 Proficiency, 2017
English, C2 Proficiency, 2012

Degree	Department/Program	University	Year
Post Doctorate	Twente Research and Education on Software Engineering (TRESE)		2012
Doctorate	BİLGİSAYAR MÜHENDİSLİĞİ BÖLÜMÜ	Istanbul Technical University	2006
Master's Degree	BİLGİSAYAR MÜHENDİSLİĞİ BÖLÜMÜ	Istanbul Technical University	1998
Bachelor's Degree	BİLGİSAYAR MÜHENDİSLİĞİ BÖLÜMÜ	Boğaziçi University	1993

Master's Thesis Title (abstract attached) and Thesis Supervisor(s):
Okunabilir kopyalama algoritmaları DSM sisteminin gerçekleştirilmesi

Doctoral Thesis/Proficiency Study/Medical Specialization Thesis Title (abstract attached) and Supervisor(s):
Etmen tabanlı dağıtılmış olay sistemi

Position Title	Workplace	Year
Professor Dr.	Biruni University	2020-Continues
Associate Professor	İstanbul Kültür University	2017-2020
Associate Professor	İstanbul Kültür University	2016-2017

Roles in Projects:

Digital Transformation in Chronic Respiratory Diseases: EvPRETT (Home Pulmonary Rehabilitation Treatment and Follow-up) Application (2024 - Continues)
Deep Learning Based Intrusion Detection System (2018 - 2020)

Administrative Duties:

Head of Main Science/Science Department - Biruni University (2024 - Continues)
Head of Department - Biruni University (2021 - Continues)

Faculty Executive Board Member - Biruni University (2020 - Continues)
 Faculty Board Member - Biruni University (2020 - Continues)
 Faculty Executive Board Member - İstanbul Kültür University (2017 - Continues)
 Faculty Board Member - İstanbul Kültür University (2017 - Continues)
 Deputy Head of Department - İstanbul Kültür University (2017 - 2017)

Awards:

Ranked among the most prestigious scientists in the world, (2024, 2023, 2022, 2021, 2020, 2019) (2025)
 Annual Performance Evaluation of Academic Staff, 2nd place of the University (2021) (2021)
 1st Place-Winner of the IEEE Turkey Undergraduate Graduation Project Competition and Exhibition-2018 (2018)
 Certificate of Merit for the 2014 International Conference of Parallel and Distributed Computing (2014)

Undergraduate and graduate level courses taught in the last two years (If offered, summer courses will also be added to the table):

Academic Year	Semester	Course Name	Weekly Hours		Number of Students
			Theoretical	Practical	
2024	Spring	Computer Project I			
2024	Fall	Computer Project I			

PUBLICATIONS

A. Articles published in international peer-reviewed journals:

- A1. "Early Detection of Fetal Health Conditions Using Machine Learning for Classifying Imbalanced Cardiotocographic Data", Diagnostics, 2025.
- A2. "Enhanced Feature Selection Using Genetic Algorithm for Machine-Learning-Based Phishing URL Detection", Applied Sciences (Switzerland), 2024.
- A3. "Vibrational Genetic Algorithm-Based Deployment of Wireless Sensor Networks With Heterogeneous Nodes in Irregularly Shaped Areas", IEEE Access, 2024.
- A4. "DEPHIDES: Deep Learning Based Phishing Detection System", IEEE Access, 2024.
- A5. "Deep Learning based Malware Detection for Android Systems: A Comparative Analysis", Tehnicki Vjesnik, 2023.
- A6. "Protecting Android Devices From Malware Attacks: A State-of-the-Art Report of Concepts, Modern Learning Models and Challenges", IEEE Access, 2023.
- A7. "A Hybrid Phishing Detection System Using Deep Learning-based URL and Content Analysis", Elektronika ir Elektrotechnika, 2022.
- A8. "Internet of Things (IoTs) Security: Intrusion Detection using Deep Learning", Journal of Web Engineering, 2021.
- A9. "Deep learning based security management of information systems: A comparative study", Journal of Advances in Information Technology, 2020.
- A10. "Increasing the Performance of Machine Learning-Based IDSs on an Imbalanced and Up-to-Date Dataset", IEEE Access, 2020.
- A11. "Machine learning based phishing detection from URLs", Expert Systems with Applications, 2019.
- A12. "Generation of bezier curve-based flyable trajectories for multi-UAV systems with parallel genetic algorithm", Journal of Intelligent and Robotic Systems: Theory and Applications, 2014.
- A13. "Networking models in flying Ad-hoc networks (FANETs): Concepts and challenges", Journal of Intelligent and Robotic Systems: Theory and Applications, 2014.
- A14. "Fuzzy logic approach and sensitivity analysis for agent-based crowd injury modeling", SIMULATION, 2014.
- A15. "Large scale wireless sensor networks with multi-level dynamic key management scheme", Journal of Systems Architecture, 2013.
- A16. "Flying Ad-Hoc Networks (FANETs): A survey", Ad Hoc Networks, 2013.
- A17. "A distributed execution environment for shared java objects", Information and Software Technology, 2004.

B. Papers presented at international scientific meetings and published in proceedings:

- B1. "Intrusion Detection with Machine Learning and Deep Learning Methods in IoT Healthcare", 8th International Artificial Intelligence and Data Processing Symposium, IDAP 2024, 2024.
- B2. "Path planning of Mobile Robot in Dynamic Environment by Evolutionary Algorithms", International Conference on Computational Systems and Communications (ICCCS2023), 2023.
- B3. "Fuzzy Logic-Based Trajectory Planning for Mobile Robots in an Uncertain and Complex Environment", ICCSC 2023 - Proceedings of the 2nd International Conference on Computational Systems and Communication, 2023.
- B4. "Deep Learning-Based Brain Tumor Detection and Classification of MRI Images", 2023 14th International Conference on Computing Communication and Networking Technologies, ICCCNT 2023, 2023.
- B5. "A Deep Learning Based Android Malware Detection System with Static Analysis", 4th International Congress on Human-Computer Interaction, Optimization and Robotic Applications, 2022.
- B6. "The Art of Machine Learning as Fashion Stylish for Designing Clothes", 4th International Congress on Human-Computer Interaction, Optimization and Robotic Applications, 2022.
- B7. "Efficient Deployment of Wireless Sensor Nodes with Evolutionary Approaches", 4th International Congress on Human-Computer Interaction, Optimization and Robotic Applications, 2022.
- B8. "Neural Network Based Android Malware Detection with Different IP Coding Methods", 2021 3rd International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA), 2021.
- B9. "Phishing Web Page Detection Using N-gram Features Extracted from URLs", 2021 3rd International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA), 2021.
- B10. "Deep Neural Network Based Phishing Classification on a High-Risk URL Dataset", 2020 International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA), 2021.
- B11. "Intelligent Ambulance Management System in Smart Cities", 2020 International Conference on Electrical Engineering (ICEE), 2020.
- B12. "Genetic Algorithm Based Optimized Waste Collection in Smart Cities", 2020 International Conference on Electrical Engineering (ICEE), 2020.
- B13. "Content Based Phishing Detection with Machine Learning", 2020 International Conference on Electrical Engineering, ICEE 2020, 2020.
- B14. "An Evolutionary Approach to Multiple Traveling Salesman Problem for Efficient Distribution of Pharmaceutical Products", 2020 International Conference on Electrical Engineering (ICEE), 2020.
- B15. "In-Vehicle Intrusion Detection System on Controller Area Network with Machine Learning Models", 2020 11th International Conference on Computing, Communication and Networking Technologies, ICCCNT 2020, 2020.
- B16. "A Comparative Analysis for Machine Learning based Software Defect Prediction Systems", 2020 11th International Conference on Computing, Communication and Networking Technologies, ICCCNT 2020, 2020.
- B17. "Job Shop Scheduling Problem and Solution Algorithms: A Review", 2020 11th International Conference on Computing, Communication and Networking Technologies, ICCCNT 2020, 2020.
- B18. "Detection of Phishing Websites by Using Machine Learning-Based URL Analysis", 2020 11th International Conference on Computing, Communication and Networking Technologies, ICCCNT 2020, 2020.
- B19. "Malware Detection in Android Systems with Traditional Machine Learning Models: A Survey", HORA 2020 - 2nd International Congress on Human-Computer Interaction, Optimization and Robotic Applications, 2020.
- B20. "Feature Selections for the Classification of Webpages to Detect Phishing Attacks: A Survey", HORA 2020 - 2nd International Congress on Human-Computer Interaction, Optimization and Robotic Applications, 2020.
- B21. "A Deep Learning Based Intrusion Detection System on GPUs", Proceedings of the 11th International Conference on Electronics, Computers and Artificial Intelligence,, 2019.
- B22. "Deep learning based classification of malaria from slide images", 2019 Scientific Meeting on Electrical-Electronics and Biomedical Engineering and Computer Science, EBBT 2019, 2019.
- B23. "Deep learning based forecasting in stock market with big data analytics", 2019 Scientific Meeting on Electrical-Electronics and Biomedical Engineering and Computer Science, EBBT 2019, 2019.
- B24. "Blockchain Based Secure Communication for IoT Devices in Smart Cities", 7th International Istanbul Smart Grids and Cities Congress and Fair, ICSG 2019, 2019.
- B25. "Smart Home Security with the use of WSNs on Future Intelligent Cities", 7th International Istanbul Smart Grids and Cities Congress and Fair, ICSG 2019, 2019.
- B26. "Deep Learning in Intrusion Detection Systems", International Congress on Big Data, Deep Learning and Fighting Cyber Terrorism, IBIGDELFT 2018, 2019.
- B27. "Intrusion detection systems with GPU-accelerated deep neural networks and effect of the depth", 2018 6th International Conference on Control Engineering and Information Technology, CEIT 2018, 2018.
- B28. "Autonomous vehicle control for lane and vehicle tracking by using deep learning via vision", 2018 6th International Conference on Control Engineering and Information Technology, CEIT 2018, 2018.

- B29. "Autonomous aerial navigation and mapping for security of smart buildings", Proceedings - 2018 6th International Istanbul Smart Grids and Cities Congress and Fair, ICSG 2018, 2018.
- B30. "Comparing deep learning performance on BigData by using CPUs and GPUs", 2018 Electric Electronics, Computer Science, Biomedical Engineerings' Meeting, EBBT 2018, 2018.
- B31. "Neural network based intrusion detection systems with different training functions", 6th International Symposium on Digital Forensic and Security, ISDFS 2018 - Proceeding, 2018.
- B32. "NLP Based Phishing Attack Detection from URLs", Intelligent Systems Design and Applications. ISDA 2017. Advances in Intelligent Systems and Computing, vol 736. Springer, Cham. https://doi.org/10.1007/978-3-319-76348-4_28, 2018.
- B33. "Multi-UAV Path Planning with Multi Colony Ant Optimization", Intelligent Systems Design and Applications. ISDA 2017. Advances in Intelligent Systems and Computing, vol 736. Springer, Cham. https://doi.org/10.1007/978-3-319-76348-4_28, 2018.
- B34. "Fault Tolerance in Real-Time Systems: A Review", Intelligent Systems Design and Applications. ISDA 2017. Advances in Intelligent Systems and Computing, vol 736. Springer, Cham. https://doi.org/10.1007/978-3-319-76348-4_28, 2018.
- B35. "Detecting phishing attacks from URL by using NLP techniques DDI Yöntemleri ile Oltaama Saldirilarinin URL'Den Tespit Edilmesi", 2nd International Conference on Computer Science and Engineering, UBMK 2017, 2017.
- B36. "2D coverage analysis of sensor networks with random node deployment", IDAP 2017 - International Artificial Intelligence and Data Processing Symposium, 2017.
- B37. "Makine Öğrenmesi sistemi ile görüntü İşleme ve en uygun parametrelerin ayarlanması", IDAP 2017 - International Artificial Intelligence and Data Processing Symposium, 2017.
- B38. "Feature selections for the machine learning based detection of phishing websites", IDAP 2017 - International Artificial Intelligence and Data Processing Symposium, 2017.
- B39. "Node placement with evolutionary algorithms for maximum coverage of heterogeneous WSNs Heterojen KAAlarda Maksimum Kapsama için Evrimsel Algoritma ile Düğüm Yerleştirme", 2017 25th Signal Processing and Communications Applications Conference, SIU 2017, 2017.
- B40. "Increasing the coverage of homogeneous wireless sensor network by genetic algorithm based deployment", 2016 6th International Conference on Digital Information and Communication Technology and Its Applications, DICTAP 2016, 2016.
- B41. "A Publish/Subscribe messaging system for wireless sensor networks", 2016 6th International Conference on Digital Information and Communication Technology and Its Applications, DICTAP 2016, 2016.
- B42. "Multi-UAV path planning with parallel genetic algorithms on CUDA architecture", GECCO 2016 Companion - Proceedings of the 2016 Genetic and Evolutionary Computation Conference, 2016.
- B43. "Multi colony ant optimization for UAV path planning with obstacle avoidance", 2016 International Conference on Unmanned Aircraft Systems, ICUAS 2016, 2016.
- B44. "Parallel solution of large scale Traveling Salesman Problems by using clustering and Evolutionary Algorithms Büyük Ölçekli Gezgin Satıcı Problemlerinin Kümeleme ve Evrimsel Algoritmalar ile Paralel Çözümü", 2016 24th Signal Processing and Communication Application Conference, SIU 2016 - Proceedings, 2016.
- B45. "Data gathering from a large scale Wireless Sensor network with means of Unmanned Aerial Vehicles İnsansız Hava Araçları ile Büyük Ölçekli Kablosuz Algılayıcı Ağlardan Veri Toplanması", 2016 24th Signal Processing and Communication Application Conference, SIU 2016 - Proceedings, 2016.
- B46. "Controlling moving targets by using unmanned aerial vehicles Hareketli Hedeflerin İnsansız Hava Araçları ile Kontrolü", Dergi Adı : 2016 24th Signal Processing and Communication Application Conference, SIU 2016 - Proceedings, 2016.
- B47. "GPU-accelerated flight route planning for multi-UAV systems using simulated annealing", Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 2016.
- B48. "2D path planning for UAVs in radar threatening environment using simulated annealing algorithm", 2015 International Conference on Unmanned Aircraft Systems, ICUAS 2015, 2015.
- B49. "Solving asymmetric traveling salesman problem using genetic algorithm Genetik Algoritma ile Asimetrik Gezgin Satıcı Problemi Çözülmesi", 2015 23rd Signal Processing and Communications Applications Conference, SIU 2015 - Proceedings, 2015.
- B50. "An intrusion detection system based on neural network Yapay Sinir Ağı Tabanlı Saldırı Tespit Sistemi", 2015 23rd Signal Processing and Communications Applications Conference, SIU 2015 - Proceedings, 2015.
- B51. "The study of experimental data transmission in wireless sensor networks Kablosuz Algılayıcı Ağı Üzerinde Deneysel Veri İletim Çalışması", 2015 23rd Signal Processing and Communications Applications Conference, SIU 2015 - Proceedings, 2015.
- B52. "Solving job shop scheduling problem with Ant Colony Optimization", CINTI 2014 - 15th IEEE International Symposium on Computational Intelligence and Informatics, Proceedings, 2014.
- B53. "Solving container loading problem with simulated annealing algorithm", CINTI 2014 - 15th IEEE International Symposium on Computational Intelligence and Informatics, Proceedings, 2014.

C. National/international books written or chapters in books:

C2. Chapters in national/international books written:

- C2.1. "Lecture Notes in Engineering and Computer Science", Springer, 2014.
- C2.2. "Lecture Notes in Engineering and Computer Science", Springer, 2014.
- C2.3. "Lecture Notes in Computer Science", Springer, 2003.
- C2.4. "Lecture Notes in Computer Science", Springer, 2003.

D. Articles published in national peer-reviewed journals:

- D1. "Comparison of Machine Learning Models in Intrusion Detection Systems", Erzincan Üniversitesi Fen Bilimleri Enstitüsü, 2020.
- D2. "Price Forecasting in Stock Exchange with Deep Learning Methods", BEU Journal of Science, 2020.
- D3. "Deep learning based security management of information systems: A comparative study", Journal of Advances in Information Technology, 2020.
- D4. "Blockchain Based Information Sharing Mechanism for Cyber Threat Intelligence," , Balkan Journal of Electrical and Computer Engineering, 2020.
- D5. "A Clustering Approach for Intrusion Detection with Big Data Processing on Parallel Computing Platform", Balkan Journal of Electrical and Computer Engineering, 2019.
- D6. "A Comparative Study of Smoothing a Vehicle's Trajectory which is Calculated by an Evolutionary Algorithm", International Journal of Computer Science and Information Security, 2016.
- D7. "A multi agent solution for UAV path planning problem with NetLogo", International Journal of Applied Engineering Research, 2016.
- D8. "A multi agent solution for UAV path planning problem with NetLogo", International Journal of Applied Engineering Research, 2016.
- D9. "A two-leveled mobile agent system for e-commerce with constraint-based filtering", Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 2004.
- D10. "Dispatching Mechanism of an Agent-Based Distributed Event System", Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 2004.
- D11. "An agent based supply chain system with neural network controlled processes", Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 2004.
- D12. "MAPSEC: Mobile-agent based publish/subscribe platform for electronic commerce", Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 2003.
- D13. "RUBDES: A rule based distributed event system", Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 2003.
- D14. "Journal of Aeronautics and Space Technologies", Journal of Aeronautics and Space Technologies, 2003.