

## CV

Aytuğ ONAN, Ph.D.

Associate Professor of Computer Science and Engineering

Division of Computer Software, Department of Computer Engineering, Faculty of Engineering and Architecture, İzmir Katip Çelebi University, 35620, İzmir/Turkey.

- Phone: +90 (551) 638 39 87
- Email: [aytugonan@gmail.com](mailto:aytugonan@gmail.com) OR [aytug.onan@ikc.edu.tr](mailto:aytug.onan@ikc.edu.tr)
- Personal Homepage: [aytugonan.github.io](http://aytugonan.github.io)
- Web of Science Researcher ID: L-4613-2018
- ORCID: 0000-0002-9434-5880
- Web of Science Profile: <https://www.webofscience.com/wos/author/rid/L-4613-2018>
- Google Scholar:  
<https://scholar.google.com.tr/citations?user=cdUqOj0AAAAJ&hl=tr&oi=ao>

## Education

- Associate Professorship: Interuniversity Council (ÜAK), Field: Computer Science and Engineering, December 2018.
- Ph.D. Degree in Computer Engineering, Ege University, İzmir/Turkey, July 2016.
- Thesis title: The development and implementation of machine learning based algorithms for sentiment analysis. Advisor: Professor Serdar Korukoğlu, Co- Advisor: Associate Professor Hasan Bulut
- MSc. Degree in Computer Engineering, Ege University, İzmir/Turkey, January 2013.
- Thesis title: Metaheuristic Algorithms for Cluster Analysis. Advisor: Professor Serdar Korukoğlu
- BSc. Degree in Computer Engineering, Izmir University of Economics, İzmir/Turkey, June 2010.

## Academic Experience

- **Associate Professor**, Department of Computer Engineering, İzmir Katip Çelebi University, İzmir/Turkey, April 2019-present.
- **Courses Given:** Artificial Neural Networks, Artificial Intelligence, MATLAB Programming, C Programming, Object Oriented Programming.
- **Assistant Professor**, Department of Software Engineering, Manisa Celal Bayar University, Manisa/Turkey, January 2017-April 2019.

- **Courses Given:** Algorithms and Programming, Computer Organization, Operating Systems, Expert Systems, Artificial Intelligence, Algorithm Design, Database Management Systems, Discrete Computational Structures, Deep Learning, Data Structures.
- **Research Assistant**, Department of Computer Engineering, Ege University, Izmir/Turkey, December 2010-January 2017.

### **Administrative Positions Held**

- **Founder and Chair**, Division of Software Engineering, İzmir Katip Çelebi University, Izmir/Turkey, July 2019-present.
- **Vice Head**, Department of Computer Engineering, Izmir Katip Çelebi University, Izmir/Turkey, May 2019-July 2022.
- **Chair**, Division of Computer Software, Department of Computer Engineering, Izmir Katip Çelebi University, Izmir/Turkey, April 2019-present.
- **Vice Head**, Department of Software Engineering, Manisa Celal Bayar University, Manisa/Turkey, February 2018-April 2019.

### **Research Interests**

Engineering & Computer Science

- **Data Mining / Data Science**
- **Text Mining / Sentiment Analysis**
- **Machine Learning / Deep Learning**
- **Artificial Intelligence / Intelligent Systems**

### **International Journal Papers (indexed in SCI, SCI-Expanded or SSCI)**

1. Onan, A. (2023). GTR-GA: Harnessing The Power of Graph-Based Neural Networks and Genetic Algorithms for Text Augmentation. *Expert Systems with Applications*, 232, 1-20.
2. Onan, A. (2023). SRL-ACO: A Text Augmentation Framework Based on Semantic Role Labeling and Ant Colony Optimization. *Journal of King Saud University-Computer and Information Sciences*, 35(7), 1-18.
3. Ağralı, M., Kılıç, V., Onan, A., Koç, E.M., Koç, A.M., Büyüktoka, R., Acar, T., & Adıbelli, Z. (2023). DeepChestNet: Artificial intelligence approach for COVID-19 detection on computed tomography images. *International Journal of Imaging Systems and Technology*, 33(3), 776-788.
4. Onan, A. (2023). Hierarchical Graph-based Text Classification Framework with Contextual Node Embedding and BERT-based Dynamic Fusion. *Journal of King Saud University- Computer and Information Science*, 35(7), 1-18.
5. Onan, A. (2022). Bidirectional convolutional recurrent neural network architecture with group-wise enhancement mechanism for text sentiment classification. *Journal of King Saud University-Computer and Information Sciences*, 34(5), 2098-2117.
6. Habek, G., Toçoğlu, M.A., & Onan, A. (2022). Bi-Directional CNN-RNN Architecture with Group-Wise Enhancement and Attention Mechanisms for Cryptocurrency Sentiment Analysis. *Applied Artificial Intelligence*, 36(1), 1-26.

7. Onan, A., & Toçoğlu, M.A. (2021) A Term-weighted neural language model and stacked bidirectional LSTM based framework for sarcasm identification, *IEEE Access*, 9, 7701-7722.
8. Onan, A. (2021). Sentiment analysis on product reviews based on weighted word embeddings and deep neural networks, *Concurrency and Computation- Practice and Experience*, 33(23).
9. Onan, A., & Toçoğlu, M. A. (2021). Weighted word embeddings and clustering based identification of question topics in MOOC discussion forum posts, *Computer Applications in Engineering Education*, 29(4), 675-689.
10. Onan, A. (2021). Sentiment analysis on massive open online course evaluations: a text mining and deep learning approach, *Computer Applications in Engineering Education*, 29(3), 572-589.
11. Bulut, H., Onan, A., & Korukoğlu, S. (2020). An improved ant-based algorithm based on heaps merging and fuzzy c-means for clustering cancer gene expression data, *Sādhanā*, 45(1), 1-17.
12. Onan, A., & Toçoğlu MA. (2020). Satire identification in Turkish news articles based on ensemble of classifiers, *Turkish Journal of Electrical Engineering & Computer Sciences*, 28, 1086-1106.
13. Onan, A. (2020). Mining opinions from instructor evaluation reviews: a deep learning approach, *Computer Applications in Engineering Education*, 28(1), 117-138.
14. Onan, A. (2019). Two-stage topic extraction model for bibliometric data analysis based on word embeddings and clustering, *IEEE Access*, 7(1), 145614-145633.
15. Onan, A. (2019). Consensus clustering based approach to imbalanced learning, *Scientific Programming*, 2019, 1-14.
16. Onan, A. (2018). Biomedical text categorization based on ensemble pruning and optimized topic modelling. *Computational and Mathematical Methods in Medicine*, 2018, 1-22.
17. Onan, A. (2018). An ensemble scheme based on language function analysis and feature engineering for text genre classification. *Journal of Information Science*, 44(1), 28-47.
18. Onan, A., Korukoğlu, S., & Bulut, H. (2017). A hybrid ensemble pruning approach based on consensus clustering and multi-objective evolutionary algorithm for sentiment classification. *Information Processing & Management*, 53(4), 814-833.
19. Onan, A., Bulut, H., & Korukoglu, S. (2017). An improved ant algorithm with LDA-based representation for text document clustering. *Journal of Information Science*, 43(2), 275-292.
20. Onan, A. (2017). Hybrid supervised clustering-based ensemble scheme for text classification. *Kybernetes*, 46(2), 330-348.
21. Onan, A., & Korukoğlu, S. (2017). A feature selection model based on genetic rank aggregation for text sentiment classification. *Journal of Information Science*, 43(1), 25-38.
22. Onan, A. (2016). Classifier and feature set ensembles for web page classification. *Journal of Information Science*, 42(2), 150-165.
23. Onan, A., Korukoğlu, S., & Bulut, H. (2016). Ensemble of keyword extraction methods and classifiers in text classification. *Expert Systems with Applications*, 57, 232-247.

24. Onan, A., Korukoğlu, S., & Bulut, H. (2016). A multiobjective weighted voting ensemble classifier based on differential evolution algorithm for text sentiment classification. *Expert Systems with Applications*, 62, 1-16.
25. Onan, A., Bal, V., & Yanar Bayam, B. (2016). The Use of Data Mining for Strategic Management: A Case Study on Mining Association Rules in Student Information System. *Croatian Journal of Education: Hrvatski časopis za odgoj i obrazovanje*, 18(1), 41-70.
26. Onan, A. (2015). A Stochastic Gradient Descent Based SVM with Fuzzy-Rough Feature Selection and Instance Selection for Breast Cancer Diagnosis. *Journal of Medical Imaging and Health Informatics*, 5(6), 1233-1239.
27. Onan, A. (2015). A fuzzy-rough nearest neighbor classifier combined with consistency-based subset evaluation and instance selection for automated diagnosis of breast cancer. *Expert Systems with Applications*, 42(20), 6844-6852.

### **Other International Journal Papers**

1. Onan, A. (2018). Sentiment analysis on Twitter based on ensemble of psychological and linguistic feature sets. *Balkan Journal of Electrical and Computer Engineering*, 6(2), 1-9.
2. Onan, A., Korukoglu, S., & Bulut, H. (2016). LDA-based Topic Modelling in Text Sentiment Classification: An Empirical Analysis. *Int. J. Comput. Linguistics Appl.*, 7(1), 101-119.

### **Book Chapters**

1. Onan, A. (2023). Leveraging synonyms and antonyms for data augmentation in sarcasm identification. In (2023). *Artificial Intelligence Application in Networks and Systems*. Springer, Cham.
2. Çelikten, A., Onan, A., & Bulut, H. (2023). Investigation of Biomedical Named Entity Recognition Methods. In 4th International Conference on Artificial Intelligence and Applied Mathematics in Engineering: ICAIAME 2022 (pp. 218-229). Cham: Springer International Publishing.
3. Onan, A., Atık, E., & Yalçın, A. (2021). Machine learning approach for automatic categorization of service support requests on university information management system. In *Intelligent and Fuzzy Techniques: Smart and Innovative Solutions* (pp. 1133-1139). Springer, Cham.
4. Toçoğlu, M.A., & Onan, A. (2021). Sentiment analysis on students' evaluation of higher educational institutions. In *Intelligent and Fuzzy Techniques: Smart and Innovative Solutions* (pp. 1693-1700). Springer, Cham.
5. Çaylı, Ö., Makav, B., Kılıç, V., & Onan, A. (2021). Mobile application based automatic systems. In *Intelligent and Fuzzy Techniques: Smart and Innovative Solutions* (pp. 1532-1539). Springer, Cham.
6. Toçoğlu, M.A., & Onan, A. (2021). Identification of sport news in Turkish news using deep learning architectures. In *Progress in Intelligent Decision Science* (pp. 3-13). Springer, Cham.
7. Onan, A. (2019). Deep learning based sentiment analysis on product reviews on Twitter. In *Big Data Innovations and Applications* (pp.80-91). Springer, Cham.
8. Toçoğlu, M.A., & Onan, A. (2019). Satire detection in Turkish news articles: a machine learning approach. In *Big Data Innovations and Applications* (pp.107-117). Springer, Cham.

9. Onan, A. (2019). Topic-enriched word embeddings for sarcasm identification. In Software Engineering Methods in Intelligent Algorithms (pp. 293-304). Springer, Cham.
10. Onan, A. (2019). Semantic query suggestion based on optimized random forests. In Artificial Intelligence and Algorithms in Intelligent Systems (pp. 91-102). Springer, Cham.
11. Onan, A. (2017). Sarcasm identification on Twitter: a machine learning approach. In Artificial Intelligence Trends in Intelligent Systems (pp. 374-383). Springer, Cham.
12. Onan, A., & Korukoğlu, S. (2016). Exploring performance of instance selection methods in text sentiment classification. In Artificial Intelligence Perspectives in Intelligent Systems (pp. 167-179). Springer, Cham.
13. Onan, A. (2015). On the performance of ensemble learning for automated diagnosis of breast cancer. In Artificial Intelligence Perspectives and Applications (pp. 119-129). Springer, Cham.
14. Onan, A. (2015). Artificial immune system based web page classification. In Software engineering in intelligent systems (pp. 189-199). Springer, Cham.

#### National Refereed Journal Papers

1. Uslu, N.A., & Onan, A. (2023). Investigating Computational Identity and Empowerment of The Students Studying Programming: A Text Mining Study. NEÜ Eregi Eğitim Dergisi, 5(1), 29-45.
2. Onan, A. (2022). Türkçe Metin Madenciliği için Dikkat Mekanizması Tabanlı Derin Öğrenme Mimarilerinin Değerlendirilmesi. Avrupa Bilim ve Teknoloji Dergisi, (34), 403-407.
3. Onan, A. (2022). Türkçe Metin Madenciliği için Çalışan Bellek Bağlantıları Tabanlı Uzun Kısa Süreli Bellek Mimarisi. Avrupa Bilim ve Teknoloji Dergisi, (34), 239-246.
4. Karga, K., Toçoğlu, M. A., & Onan, A. (2022). Deep Learning-Based Sentiment Analysis on Education During the COVID-19 Pandemic. Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi, 24(72), 855-868.
5. Özdemir, A., Onan, A., & ERGENE, V. Ç. (2022). Machine Learning and Ensemble Learning Based Method Using Online Employee Assessments to Identify and Analyze Job Satisfaction Factors. Avrupa Bilim ve Teknoloji Dergisi, (40), 19-28.
6. Uslu, B., ÇAYLI, Ö., KILIÇ, V., & Onan, A. (2022). Resnet based Deep Gated Recurrent Unit for Image Captioning on Smartphone. Avrupa Bilim ve Teknoloji Dergisi, (35), 610-615.
7. AYDIN, S., ÇAYLI, Ö., KILIÇ, V., & Onan, A. (2022). Sequence-to-Sequence Video Captioning with Residual Connected Gated Recurrent Units. Avrupa Bilim ve Teknoloji Dergisi, (35), 380-386.2. Onan, A. (2021). Haber metinlerinden sosyo-ekonomik ve epidemiyolojik konuların metin madenciliğine dayalı belirlenmesi. Avrupa Bilim ve Teknoloji Dergisi, 2021.
8. Keskin, R., Çaylı, Ö., Moral, Ö.T., Kılıç, V., & Onan, A. (2021). A benchmark for feature-injection architectures in image captioning. Avrupa Bilim ve Teknoloji Dergisi, 31, 461-468.
9. Fetiler, B., Çaylı, Ö., Moral, Ö.T., Kılıç, V., & Onan, A. (2021). Video captioning based on multi-layer gated recurrent unit for smartphones. Avrupa Bilim ve Teknoloji Dergisi, 31, 461-468.

10. Onan, A. (2021). COVID-19 ile ilgili sosyal medya gönderilerinin metin madenciliği yöntemlerine dayalı olarak zaman-mekansal analizi. Avrupa Bilim ve Teknoloji Dergisi, 2021.
11. Göçgün, Ö.F., & Onan, A. (2021). Amazon ürün değerlendirmeleri üzerinde derin öğrenme/makine öğrenmesi tabanlı duygusal analizi yapılması. Avrupa Bilim ve Teknoloji Dergisi, 24, 445-448.
12. Özdemir, A., Onan, A., & Ergene, V. (2021). İş Tatmini Faktörlerini Belirlemeye Ve Analiz Etmeye Yönelik Olarak Çalışanların Çevrimiçi Değerlendirmelerinin Sınıflandırıcı Topluluklarına Dayalı Analizi. Avrupa Bilim ve Teknoloji Dergisi, 28, 531-538.
13. Özdemir, A., Onan, A., & Ergene, V. (2021). Çalışanların Çevrimiçi Değerlendirmelerinin İş Tatmini Faktörlerini Belirlemeye ve Analiz Etmeye Yönelik Olarak Makine Öğrenmesine Dayalı Analizi. Avrupa Bilim ve Teknoloji Dergisi, 28, 526-530.
14. Onan, A. (2021). Ensemble of classifiers and term weighting schemes for sentiment analysis in Turkish. Scientific Research Communications, 1(1), 1-12.
15. Onan, A. (2020). Evrişimli sinir ağı mimarilerine dayalı Türkçe duygusal analizi. Avrupa Bilim ve Teknoloji Dergisi, 2020, 374-380.
16. Onan, A., Yalçın, A., & Atik, E. (2020). Üniversite Bilgi Yönetim Sistemi Servis Destek Taleplerinin Konu Modelleme Tabanlı Analizi. Avrupa Bilim ve Teknoloji Dergisi, 2020, 352-359.
17. Onan, A. (2018). A clustering based classifier ensemble approach to corporate bankruptcy prediction. Alphanumeric Journal, 6(2), 365-376.
18. Onan, A. (2018). Parçacık sürüsü eniyilemesine dayalı yiğilmiş genellemeye yöntemi ve metin sınıflandırma üzerinde uygulanması. Akademik Platform Mühendislik ve Fen Bilimleri Dergisi, 6(2), 131-141.
19. Onan, A. (2018). Metin belgesi kümelemede metasezgisel yöntemlere dayalı kümeleme algoritmaları. Akıllı Sistemler ve Uygulamaları Dergisi, 1(2), 206-212.
20. Okyay, M.S., Alaybeyoğlu, A., & Onan, A. (2018). Yapay zeka tabanlı akıllı muhasebe Android mobil uygulama tasarımı. Akıllı Sistemler ve Uygulamaları Dergisi, 1(1), 111-116.
21. Onan, A., Alaybeyoğlu, A., & Okyay, M.S. (2018). A design and application of Android mobile based smart business accounting software. Sakarya University Journal of Computer and Information Sciences, 1(1), 22-35.
22. Onan, A. (2017). Twitter mesajları üzerinde makine öğrenmesi yöntemlerine dayalı duygusal analizi. Yönetim Bilişim Sistemleri Dergisi, 3(2), 1-14.
23. Onan, A., & Korukoğlu, S. (2016). Makine öğrenmesi yöntemlerinin görüş madenciliğinde kullanılması üzerine bir literatür araştırması. Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, 22(2), 111-122.
24. Onan, A. (2015). Şirket iflaslarının tahmin edilmesinde karar ağacı algoritmalarının karşılaştırmalı başarım analizi. Bilişim Teknolojileri Dergisi, 8(1), 9-19.
25. Onan, A. (2014). Promethee Sıralama Yönteminin Konut Projelerinin Değerlendirilmesinde Kullanılması. AKÜ İİBF Dergisi, XVI(1), 17-28.
26. Onan, A. (2013). Metasezgisel yöntemler ve uygulama alanları. Çukurova Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 17(2), 113-128.

1. Öztürk, O., Özer-Kaya, D., & Onan, A. (2023). Comparing the accuracy of machine learning models for accelerometer-based movement measurements. ESMAC 2023.
2. Korkut, S.O., Onan, A., Ulker, E., & Yalçın, F. (2023). Optimal Parameter Selection of Latent Dirichlet Allocation to Determine the Emerging Topics in Hydrology Domain. Second International Conference on Computing, IoT and Data Analytics, ICCIDA 2023.
3. Durak, H.Y., & Onan, A. (2023). An Examination of Studies on the Use of Chatbot Technology in the Field of Education. 5th International Conference on Applied Engineering and Natural Sciences, ICAENS 2023.
4. Durak, H.Y., & Onan, A. (2023). Turkish Adaptation of the Chatbot System, Information and Service Quality Scale. 5th International Conference on Applied Engineering and Natural Sciences, ICAENS 2023.
5. Ezgi, A., & Onan, A. (2023). Automatic Knee Osteoarthritis Severity Grading using Deep Neural Networks: Comparative Analysis of Network Architectures and Optimization Functions. 5th International Conference on Applied Engineering and Natural Sciences, ICAENS 2023.
6. Göçgün, Ö.F., Yalçın, F., & Onan, A. (2023). Federe Öğrenme Algoritmaları ve Açık Kaynak Çerçeveeler. 5th International Conference on Applied Engineering and Natural Sciences, ICAENS 2023.
7. Habek, G.C., Toçoğlu, M.A., & Onan, A. (2023). Cryptocurrency Sentiment Analysis using Automatically Labeled Dataset. 3rd International Symposium of Scientific Research and Innovative Studies, ISSRIS 2023.
8. Moral, O. T., Kılıç, V., Onan, A., & Wang, W. Automated Image Captioning with Multi-layer Gated Recurrent Unit. The 30th European Signal Processing Conference, EUSIPCO 2022.
9. Caylı, O., Kılıç, V., Onan, A., & Wang, W. Auxiliary Classifier based Residual RNN for Image Captioning. The 30th European Signal Processing Conference, EUSIPCO 2022.
10. Demirci-Uzun, S., Bulut, V., & Onan, A. (2022). Toxicity Identification Using The Neural Network Algorithm. 3rd International Conference on Applied Engineering and Natural Sciences (ICAENS 2022), 2022.
11. Demirci-Uzun, S., Bulut, V., & Onan, A. (2022). Decision tree based toxicity identification of metal and metal oxide nanoparticles. Izmir International Conference on Technology and Social Sciences, IICTSS 2022.
12. Demirci-Uzun, S., Bulut, V., & Onan, A. (2022). Prediction of toxicity based on linear regression, SVM and GPR machine learning algorithms. International Gobeklitepe Applied Sciences Congress 2022.
13. Onan, A. (2021). Identification of Deceptive Opinion Spam Based on Deep Neural Networks. In IAC in Budapest 2021.
14. Onan, A. (2021). Spatiotemporal Analysis of Social Media Posts on COVID-19 Based on Topic Modelling. In VIAC2021 - COVID-19.
15. Onan, A. (2021). Topic modelling-based identification of socio-economic and epidemiological issues from news documents. In International Academic Conference on Engineering, Transport, IT and AI (IAC-ETITAI 2021).
16. Onan, A. (2021). On the performance of classifiers and feature sets for identification of offensive and hateful language on social media. In International Academic Conference on Engineering, Transport, IT and AI (IAC-ETITAI 2021).

17. Toçoğlu, M., & Onan, A. (2021). Identification of Medical Forum Posts on Hypertension and Cholesterol Based on Machine Learning. In First International Conference on Computing and Machine Intelligence (ICMI 2021).
18. Onan, A. (2021). Haber metinlerinden sosyo-ekonomik ve epidemiyolojik konuların metin madenciliğine dayalı belirlenmesi. In 3rd International Conference on Human-Computer Interaction, Optimization and Robotic Applications (HORA 2021).
19. Özdemir, A., Onan, A., & Ergene, V. (2021). İş Tatmini Faktörlerini Belirlemeye Ve Analiz Etmeye Yönelik Olarak Çalışanların Çevrimiçi Değerlendirmelerinin Sınıflandırıcı Topluluklarına Dayalı Analizi. In 1st International Conference on Applied Engineering and Natural Sciences (ICAENS 2021).
20. Özdemir, A., Onan, A., & Ergene, V. (2021). Çalışanların Çevrimiçi Değerlendirmelerinin İş Tatmini Faktörlerini Belirlemeye ve Analiz Etmeye Yönelik Olarak Makine Öğrenmesine Dayalı Analizi. In 1st International Conference on Applied Engineering and Natural Sciences (ICAENS 2021).
21. Onan, A. (2021). COVID-19 ile ilgili sosyal medya gönderilerinin metin madenciliği yöntemlerine dayalı olarak zaman-mekansal analizi. In 3rd International Conference on Human-Computer Interaction, Optimization and Robotic Applications (HORA 2021).
22. Göçgün, Ö.F., & Onan, A. (2021). Amazon ürün değerlendirmeleri üzerinde derin öğrenme/makine öğrenmesi tabanlı duygusal analizi yapılması. In 2nd International Conference on Access to Recent Advances in Engineering and Digitalization (ARACONF 2021).
23. Onan, A., Atik, E., & Yalçın, A. (2020). Machine learning approach for automatic categorization of service support requests on university information management system. In 2nd International Conference on Intelligent and Fuzzy Systems (INFUS 2020).
24. Çaylı, Ö., Makav, B., Kılıç, V., & Onan, A. (2020). Mobile application based automatic caption generation for visually impaired. In 2nd International Conference on Intelligent and Fuzzy Systems (INFUS 2020).
25. Toçoğlu, M.A., & Onan, A. (2020). Sentiment analysis on students' evaluation of higher educational institutions. In 2nd International Conference on Intelligent and Fuzzy Systems (INFUS 2020).
26. Toçoğlu, M.A., & Onan, A. (2020). Identification of sport news in Turkish Tweets using deep learning architectures. In International Conference on Intelligent Decision Science (IDS 2020).
27. Onan, A. (2020). Evrişimli sinir ağı mimarilerine dayalı Türkçe duygusal analizi. In 2nd International Conference on Human-Computer Interaction, Optimization and Robotic Applications (HORA 2020).
28. Onan, A., Yalçın, A., & Atik, E. (2020). Üniversite Bilgi Yönetim Sistemi Servis Destek Taleplerinin Konu Modelleme Tabanlı Analizi. In 2nd International Conference on Human-Computer Interaction, Optimization and Robotic Applications (HORA 2020).
29. Çaylı, Ö., Makav, B., Kılıç, V., & Onan, A. (2020). Natural language description of images using a smartphone application. In Second International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2020).
30. Onan, A. (2019). Deep learning based sentiment analysis on product reviews on Twitter. In 5th International Conference on Big Data Innovations and Applications (Innovate-Data 2019).

31. Toçoğlu, M.A., & Onan, A. (2019). Satire detection in Turkish news articles: a machine learning approach. In 5th International Conference on Big Data Innovations and Applications (Innovate-Data 2019).
32. Onan, A. (2019). Türkçe Twitter mesajları üzerinde yarı-öğreticili duygusal analizi. In International Design and Engineering Symposium (IDES 2019).
33. Onan, A. (2019). Kitlesel açık çevirmiçi ders değerlendirmeleri üzerinde konu modelleme yöntemlerine dayalı duygusal analizi. In International Design and Engineering Symposium (IDES 2019).
34. Onan, A. (2019). Türkçe metin belgeleri üzerinde küme topluluklarına dayalı kümeleme analizi. In International Design and Engineering Symposium (IDES 2019).
35. Leblebici, A., Uncu, B., Onan, A., Baskın, Y., & Olgun, N. (2018). Artificial intelligence methods for risk assessment of neuroblastoma. In 50th Congress of the International Society of Paediatric Oncology (SIOP 2018). (Poster)
36. Onan, A. (2018). Gender classification on microblogging platforms: a machine learning approach. In 7th International Conference on Advanced Technologies (ICAT 2018). (Best Presentation Award)
37. Onan, A. (2018). Ensemble gene selection analysis scheme on microarray gene expression data. In 7th International Conference on Advanced Technologies (ICAT 2018).
38. Onan, A. (2018). Supervised term weighting schemes for opinion spamming. In 4th International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2018).
39. Onan, A. (2018). On the performance of cluster ensembles for document clustering. In 4th International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2018).
40. Onan, A. (2018). Öğrencilerin akademik başarılarının tahmin edilmesinde makine öğrenmesi yöntemlerinin başarım analizi. In 8th International Congress of Research in Education (ULEAD 2018).
41. Onan, A., Solmaz, M., & Arslan, B. (2018). GEOME3D: Geometrik kavramların eğitimiyle yönelik görsel eğitim yazılımı. In 8th International Congress of Research in Education (ULEAD 2018).
42. Onan, A. (2017). Psycholinguistic feature sets in sentiment analysis on Twitter: an empirical analysis. In International Advanced Researches and Engineering Congress (IAREC 2017).
43. Onan, A. (2017). Sentiment analysis on Twitter messages based on machine learning methods. In 4th International Management Information Systems Conference (IMISC 2017).
44. Onan, A. (2017). A K-medoids based clustering scheme with an application to document clustering. In 2nd International Conference on Computer Science and Engineering (UBMK 2017).
45. Onan, A. (2017). A machine learning based approach to identify geo-location of Twitter users. In Proceedings of the ACM Second International Conference on Internet of Things and Cloud Computing (ICC 2017).
46. Onan, A., Korukoğlu, S., & Bulut, H. (2016). LDA-based topic modelling in text sentiment classification: an empirical analysis. In 17th International Conference on Computational Linguistics and Intelligent Text Processing (CICLING 2016).

47. Onan, A., & Korukoğlu, S. (2013). Improving performance of glowworm swarm optimization for cluster analysis using k-means. In International Symposium on Computing in Science & Engineering.

### National Conference Proceedings

1. Onan, A. (2018). Psikolojik ve dilbilimsel özniteliklere dayalı istenmeyen inceleme metni belirleme. SİU 2018- 26. IEEE Sinyal İşleme ve İletişim Uygulamaları Kurultayı.
2. Onan, A. (2018). Topluluk öğrenmesine dayalı öznitelik seçimi ve metin sınıflandırımda uygulanması. SİU 2018- 26. IEEE Sinyal İşleme ve İletişim Uygulamaları Kurultayı.
3. Onan, A. (2017). Metin belgesi kümelemede metasezgisel yöntemlere dayalı kümeleme algoritmaları. ASYU 2017- Akıllı Sistemlerde Yenilikler ve Uygulamaları Konferansı.
4. Okyay, M.S., Alaybeyoğlu, A., & Onan, A. (2017). Yapay zeka tabanlı akıllı muhasebe Android mobil uygulama tasarımı. ASYU 2017- Akıllı Sistemlerde Yenilikler ve Uygulamaları Konferansı.
5. Onan, A. (2017). Türkçe Twitter mesajlarında gizli Dirichlet tahsisine dayalı duygusal analizi. Akademik Bilişim.
6. Onan, A., & Korukoğlu, S. (2016). Metin sınıflandırımda öznitelik seçim yöntemlerinin değerlendirilmesi. Akademik Bilişim.
7. Taşçı, E., & Onan, A. (2016). K-en yakın komşu algoritması parametrelerinin sınıflandırma performansı üzerine etkisinin incelenmesi. Akademik Bilişim.
8. Onan, A., & Korukoğlu, S. (2015, May). Ensemble methods for opinion mining. In Signal Processing and Communications Applications Conference (SIU), 2015 23th (pp. 212-215). IEEE.
9. Onan, A. (2014). Öğrenci bilgi sistemi verileri üzerinde veri madenciliği sınıflandırıcılarına dayalı başarı durumu tahmini. YBS 2014- Yönetim Bilişim Sistemleri Konferansı.

### Editorial Board

- Elsevier: Journal of King Saud University- Computer and Information Sciences (**Indexed in SCI-Expanded, Q1**, **Associate Editor**, 2019-present).
- Elsevier: Machine Learning with Applications, (**Indexed in EI**, **Associate Editor**, 2023-present).
- Elsevier: Software Impacts Journal, (**Indexed in ESCI**, **Associate Editor**, 2023-present).
- KSII: Transactions on Internet and Information Systems (**Indexed in SCI-Expanded**), **Editor**, 2019-present.

### Program Committee

- SPELL 2022: First International Conference on Speech and Language Technologies for Low-Resource Languages, November 2022.

### Committee Memberships

- İzmir Development Agency (IZKA), Member of the Evaluation Committee of Digital Transformation Projects in the Public Sector, November 2022.

### Reviewer for

- IEEE Transactions on Artificial Intelligence
- IEEE Transactions on Neural Networks and Learning Systems
- IEEE Transactions on Intelligent Transportation Systems
- IEEE Systems Journal
- IEEE Transactions on Systems, Man, and Cybernetics: Systems
- IEEE Access
- IEEE Transactions on Emerging Topics in Computational Intelligence
- IEEE Transactions on Computational Social Systems
- IEEE Sensors Letters
- IEEE Transactions on Human-Machine Systems
- ACM Transactions on Knowledge Discovery from Data
- Expert Systems with Applications
- Information Processing & Management
- Computational Intelligence and Neuroscience
- Complexity
- Concurrency and Computation: Practice and Experience
- Scientific Programming
- Mathematical Problems in Engineering
- Expert Systems
- Computer Methods in Biomechanics and Biomedical Engineering
- Journal of Healthcare Engineering
- Journal of King Saud University- Computer and Information Sciences
- Computational and Mathematical Methods in Medicine
- Applied Soft Computing
- Computer Applications in Engineering Education
- Security and Communication Networks
- Wireless Communications and Mobile Computing
- Connection Science
- Journal of Intelligent & Fuzzy Systems
- Biomedical Signal Processing and Control
- Data Technologies and Applications
- Artificial Intelligence in Medicine
- Journal of Intelligent Systems
- Turkish Journal of Electrical Engineering & Computer Sciences
- Mobile Information Systems
- Applied Computational Intelligence and Soft Computing
- IETE Journal of Research

- Journal of Mathematics
- CAAI Transactions on Intelligence Technology
- Computers, Materials and Continua
- ETRI Journal
- Journal of Information Science
- Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi
- Computer Methods and Programs in Biomedicine
- Electronic Letters
- International Journal of Machine Learning and Cybernetics
- International Journal of Pattern Recognition and Artificial Intelligence
- Journal of Control and Decision
- Kybernetes
- Journal of Current Science and Technology
- Journal of Experimental and Theoretical Artificial Intelligence
- Journal of Internet Technology
- Plos One
- ACM Transactions on Asian and Low-Resource Language Information Processing
- Applied Artificial Intelligence
- Discrete Dynamics in Nature and Society
- Behaviour & Information Technology
- Journal of Information Technology & Politics
- Journal of the Association for Information Science and Technology
- ACM Transactions on Intelligent Systems and Technology
- Advances in Materials Science and Engineering
- BMC Biomedical Informatics and Decision Making
- BioMed Research International
- Cognitive Systems and Computation
- Computational Intelligence

## Awards

- Listed in “**Most Influential Scientists of the World- 2022**” created by a research team led by Dr. John Ioannidis from Stanford University, USA. The list created by the research team, consisting of US and Dutch scientists, because of an assessment made among millions of academics worldwide.
- Listed in “**Most Influential Scientists of the World- 2021**” created by a research team led by Dr. John Ioannidis from Stanford University, USA. The list created by the research team, consisting of US and Dutch scientists, because of an assessment made among millions of academics worldwide.
- Listed in “**Most Influential Scientists of the World- 2020**” created by a research team led by Dr. John Ioannidis from Stanford University, USA. The list created by the

research team, consisting of US and Dutch scientists, because of an assessment made among millions of academics worldwide.

- İzmir Katip Çelebi University: **Certificate of Appreciation (Academic Incentive)** (Ranked first place for Faculty and Department) - January 2022.
- İzmir Katip Çelebi University: **Certificate of Appreciation (World's Most Influential Scientists List)** - January 2022.
- İzmir Katip Çelebi University: **Certificate of Appreciation (World's Most Influential Scientists List)** - January 2021.
- İzmir Katip Çelebi University: **Scientific Award (Academic Incentive Award)** - January 2021.
- Wiley: **Top Cited Article 2020-2021**, Computer Applications in Engineering Education - January 2022.
- Wiley: **Top Cited Article 2020-2021**, Concurrency and Computation: Practice and Experience - January 2022.
- Publons: **Top Reviewers for Computer Science** - September 2018
- Publons: **Top Reviewers for Engineering** - September 2018
- Publons: **Top Reviewers for Computer Science** - September 2017
- Elsevier: Expert Systems with Applications, **Outstanding Contribution in Reviewing**, August 2018.
- Elsevier: Journal of King Saud University- Computer and Information Sciences, **Outstanding Contribution in Reviewing**, September 2017.
- Elsevier: Applied Soft Computing, **Outstanding Contribution in Reviewing**, May 2017.
- Elsevier: Mathematical Biosciences, **Outstanding Contribution in Reviewing**, February 2017.
- Elsevier: Expert Systems with Applications, **Outstanding Contribution in Reviewing**, July 2016.
- Elsevier: Applied Soft Computing, **Outstanding Contribution in Reviewing**, May 2015.

## Research Projects

- TÜBİTAK 1002, A generative adversarial network-based decision support system for artificial intelligence-based rare dermatological disease diagnosis (Project Manager)
- TÜBİTAK-British Council International Bilateral Collaboration, Automatic Image and Audio Captioning for the Visually and Hearing Impaired (Researcher)
- TÜBİTAK 3501, Investigation of the Change of Quantitative Electroencephalography Parameters with Repetitive Transcranial Magnetic Stimulation (rTMS) Treatment in Stroke Patients and Estimation of Clinical Response to rTMS Treatment with Convolutional Neural Network Method (Researcher)
- TÜBİTAK 1002, Obtaining the Shortest Path Between Two Points on a Semi-Expandable Bezier Surface Using the Q-Learning Algorithm with Increased Openability (Researcher)
- İzmir Katip Çelebi University, Scientific Research Project, The implementation of groupwise enhancement and attention mechanisms for Turkish Text Mining Problems (Project Manager)

- İzmir Katip Çelebi University, Scientific Research Project, Automatic Image Captioning for Visually Impaired Individuals (Researcher)
- İzmir Katip Çelebi University, Scientific Research Project, Investigation of the Change of Quantitative Electroencephalography Parameters with Repetitive Transcranial Magnetic Stimulation (rTMS) Treatment in Stroke Patients and Estimation of Clinical Response to rTMS Treatment with Convolutional Neural Network Method (Researcher)
- İzmir Katip Çelebi University, Scientific Research Project, Automatic Analysis of Hand Graphs in Rheumatoid Arthritis Patients with Machine Learning Method (Researcher)
- İzmir Katip Çelebi University, Scientific Research Project, Development of a Deep Learning Based Word Coding Representation Method for Turkish Text Mining Applications (Project Manager)
- İzmir Katip Çelebi University, Scientific Research Project, Detection of Lung Computed Tomography Results of Patients Applying with a Pre-Diagnosis of COVID-19 with Artificial Intelligence (Vice Project Executive)
- KOSGEB Supported Research Project, Hardware and Software Platform Development Project for Smart Energy Management (Project Consultant)
- Manisa Celal Bayar University, Scientific Research Project, License Plate Tracking System (Researcher)
- Manisa Celal Bayar University, Scientific Research Project, Data Mining Application in Strategic Management of MCBU(Researcher)
- Ege University, Scientific Research Project, Application of Metaheuristic Methods in Cluster Analysis (Researcher)