

## Assoc.Prof. Dilek Küçük

---

CONTACT INFORMATION	<p>TÜBİTAK - Marmara Research Center (MRC), Ankara – Türkiye Web: <a href="https://dkucuk.github.io/">https://dkucuk.github.io/</a> ORCID: 0000-0003-2656-1300 ResearcherID: D-4752-2015 Scopus Author ID: 25652213800</p>
EDUCATION	<p>2019–2023: Ankara Hacı Bayram Veli University, Faculty of Law (LLB) 2005–2011: Middle East Technical University, Computer Engineering (Ph.D.) 2003–2005: Middle East Technical University, Computer Engineering (M.Sc.) 1999–2003: Middle East Technical University, Computer Engineering (B.Sc.)</p>
PROFESSIONAL EXPERIENCE	<ul style="list-style-type: none"><li>• Senior Chief Researcher at TÜBİTAK MRC, Turkey (2022 – )</li><li>• Part-time Researcher at METU Dept. of Computer Eng., Turkey (2023 – 2024)</li><li>• Legal Intern at Ankara Bar Association, Turkey (2023 – 2024)</li><li>• Group Leader at TÜBİTAK MRC Energy Institute, Turkey (2016 – 2022)</li><li>• Chief Researcher at TÜBİTAK MRC Energy Institute, Turkey (2012 – 2022)</li><li>• Post-doctoral Researcher at European Commission, Joint Research Centre (JRC), Italy (May, 2013 – May, 2014)</li><li>• Chief Researcher at TÜBİTAK Uzay Institute, Turkey (2011 – 2012)</li><li>• Part-time Instructor at Gazi University, Turkey (February, 2012 – June, 2012)</li><li>• Senior Researcher at TÜBİTAK Uzay Institute, Turkey (2007 – 2011)</li><li>• Computer Engineer at HAVELSAN, Turkey (2003 – 2007)</li></ul>
AWARDS, HONOURS, AND GRANTS	<ul style="list-style-type: none"><li>• Attorney’s License (October, 2024)</li><li>• Best Research Group (Award) at TÜBİTAK MRC for the year 2017 - Group Leader (July, 2018)</li><li>• Associate Professor Title from Inter-University Council of Turkey (March, 2017)</li><li>• Post-doctoral Research Grant from TÜBİTAK (2013)</li><li>• Serhat Özyar Young Scientist of the Year Honorary Award (2012)</li><li>• Thesis of the Year Award bestowed by Parlar Foundation with the Ph.D. thesis (2011)</li><li>• Ranked 643rd at University Entrance Exam among ~1.5 million students (1999)</li><li>• Ranked 1st in Black Sea Region at TÜBİTAK Mathematics Olympiads (1998)</li></ul>

RESEARCH  
INTERESTS

- Stance detection and sentiment analysis
- AI and law
- Social media analysis
- Named entity recognition and other information extraction tasks
- Ontologies and knowledge-bases
- Energy informatics
- Database and data mining applications in engineering domains

TRAININGS

- PMP Certification Exam Prep Course at <https://tubitakmam.udemy.com/> (TÜBİTAK MAM), Türkiye (35 hours, 2024)
- Meeting and Time Management Course at TÜBİTAK TÜSSİDE, Turkey (1 day, 2016)
- Leadership and Management Course at TÜBİTAK TÜSSİDE, Turkey (1 day, 2016)
- Online Italian Language (A2 & B1 levels) Course at <http://www.tellmemorepro.com> (JRC) (35 hours, 2014)
- Italian Language (A1 & A2 levels) Course at JRC, Italy (60 hours, 2013)
- Preparatory Course for International Science Olympiads in Mathematics - TÜBİTAK, Turkey (2 weeks, 1998)

PROFESSIONAL  
ACTIVITIES

*I reviewed papers for the following scholarly journals:*

ACM Computing Surveys, ACM Transactions on Asian and Low-Resource Language Information Processing, Advanced Engineering Informatics, Applied Energy, Applied Sciences, Applied Soft Computing, Cartography and Geographic Information Science, Computer Speech and Language, Computers in Biology and Medicine, Data in Brief, Energy, Engineering Applications of Artificial Intelligence, Expert Systems with Applications, IEEE Access, IEEE Transactions on Audio, Speech and Language Processing, IEEE Transactions on Emerging Topics in Computational Intelligence, IEEE Transactions on Industrial Informatics, IEEE Transactions on Knowledge and Data Engineering, IEEE Transactions on Neural Networks and Learning Systems, IEEE Transactions on Power Systems, IEEE Transactions on Smart Grid, IEEE Transactions on Systems, Man, and Cybernetics: Systems, IET Generation, Transmission & Distribution, Information Processing and Management, International Journal of Medical Informatics, Journal of Computational Social Science, Journal of Information Science, Journal of Intelligent Systems, Journal of the Faculty of Engineering and Architecture of Gazi University, Knowledge-Based Systems, Language Resources and Evaluation, Marmara Fen Bilimleri Dergisi, Natural Language Engineering, Neurocomputing, Online Social Networks and Media, PeerJ Computer Science, Scientific Reports, Turkish Journal of Electrical Engineering & Computer Sciences

*I reviewed papers for the following conferences:*

ISCIS (2010, 2011, 2013), FQAS (2011), ICECCO (2013), ICPR (2016), CIKM (2019), ECIR (2019, 2020), ICPR (2020), WSDM (2021), SIGIR (2025)

THESIS SUPERVISED	Co-supervisor for M.Sc. thesis entitled <i>Named Entity Recognition in Turkish with Bayesian Learning and Hybrid Approaches</i> , Department of Computer Engineering, Middle East Technical University. December, 2011.
COURSES TAUGHT	<ol style="list-style-type: none"> <li>1. <i>Introduction to Data and Decision Sciences</i> – Spring 2024, Middle East Technical University.</li> <li>2. <i>Algorithms and Data Structures with Python</i> – Spring 2024, Middle East Technical University.</li> <li>3. <i>Veri Tabanı Yönetim Sistemleri</i> (‘Database Management Systems’) – Spring 2012, Gazi University.</li> </ol>
TECHNICAL SKILLS	<ul style="list-style-type: none"> <li>• <i>Programming</i>: C, Java, C#, JavaScript, JSP, JSF, SQL, PL/SQL, Python, Lisp, Prolog, ML.</li> <li>• <i>Applications</i>: PostgreSQL, Oracle, IBM DB2, Eclipse IDE, IBM WSAD, Apache Tomcat, Matlab, L<sup>A</sup>T<sub>E</sub>X, Weka, PrimeFaces, MS Visual Studio.</li> <li>• <i>Operating Systems</i>: MS Windows, Unix, Linux.</li> </ul>
LANGUAGES	<ul style="list-style-type: none"> <li>• Turkish (native language)</li> <li>• English (proficient)</li> <li>• Italian (intermediate)</li> </ul>
PUBLICATIONS	<p><b>International Journal Publications (SCI or SCI-E Indexed)</b></p> <ol style="list-style-type: none"> <li>1. Güvengir, U., Küçük, D., Keleş, M. 2025. <i>Online Fine-grained Root Cause Classification for Power Quality Disturbances</i>. IEEE Access, <a href="https://doi.org/10.1109/ACCESS.2025.3637816">https://doi.org/10.1109/ACCESS.2025.3637816</a></li> <li>2. Küçük, D., Can, F. <i>Stance Detection: A Survey</i>. ACM Computing Surveys, Vol. 53, No. 1, Article 12, February 2020.</li> <li>3. Buhan, S., Küçük, D., Çinar, M. S., Güvengir, U., Demirci, T., Yılmaz, Y., Malkoç, F., Eminoğlu, E., Yıldırım, M. U. <i>A Scalable River Flow Forecast and Basin Optimization System for Hydropower Plants</i>. IEEE Transactions on Sustainable Energy, Volume 11, Issue 4, pp. 2220–2229, October 2020.</li> <li>4. Küçük, E. E., Yapar, K., Küçük, D., Küçük, D. <i>Ontology-based Automatic Identification of Public Health-Related Turkish Tweets</i>. Computers in Biology and Medicine, 83, pp. 1–9, April 2017.</li> <li>5. Eren, S., Küçük, D., Ünlüer, C., Demircioğlu, M., Yanık, Y., Arslan, Y., Özsoy, B., Güverçinci, A. H., Elma, İ., Tanıdır, Ö., Ölmez, Y. C., Sönmez, S. <i>A Ubiquitous Web-based Dispatcher Information System for Effective Monitoring and Analysis of the Electricity Transmission Grid</i>. International Journal of Electrical Power and Energy Systems, 86, pp. 83–103, March 2017.</li> <li>6. Küçük, D. <i>A High-Level Electrical Energy Ontology with Weighted Attributes</i>. Advanced Engineering Informatics, Volume 29, Issue 3, pp. 513–522, August 2015.</li> </ol>

7. Küçük, D. *Automatic Compilation of Language Resources for Named Entity Recognition in Turkish by Utilizing Wikipedia Article Titles*. Computer Standards & Interfaces, Volume 41, pp. 1–9, September 2015.
8. Terciyanlı, E., Demirci, T., Küçük, D., Saraç, M., Çadircı, I., Ermiş, M. *Enhanced Nationwide Wind Electric Power Monitoring and Forecast System*. IEEE Transactions on Industrial Informatics, Volume 10, Issue 2, pp. 1171–1184, May 2014.
9. Küçük, D. and Arslan, Y. *Semi-Automatic Construction of a Domain Ontology for Wind Energy Using Wikipedia Articles*. Renewable Energy, Volume 62, pp. 484–489, February 2014.
10. Küçük, D. and Yazıcı, A. *A Semi-Automatic Text-Based Semantic Video Annotation System for Turkish Facilitating Multilingual Retrieval*. Expert Systems with Applications, Volume 40, Issue 9, pp. 3398–3411, July 2013.
11. Küçük, D., Salor, Ö., Güder, M., Demirci, T., İnan, T., Akkaya Y., Çadircı, I., Ermiş, M. *Assessment of Extensive Countrywide Electrical Power Quality Measurements through a Database Architecture*. Electrical Engineering, Volume 95, Issue 1, pp. 1–19, 2013.
12. Küçük, D. and Yazıcı, A. *A Hybrid Named Entity Recognizer for Turkish*. Expert Systems with Applications, Volume 39, Issue 3, pp. 2733–2742, February 2012.
13. Küçük, D. and Yazıcı, A. *Exploiting Information Extraction Techniques for Automatic Semantic Video Indexing with an Application to Turkish News Videos*. Knowledge-Based Systems, Volume 24, Issue 6, pp. 844–857, August 2011.
14. Demirci, T., Kalaycıoğlu, A., Küçük, D., Salor, Ö., Güder, M., Pakhuylu, S., Atalık, T., İnan, T., Çadircı, I., Akkaya, Y., Bilgen, S. and Ermiş, M. *Nationwide Real-Time Monitoring System for Electrical Quantities and Power Quality of the Electricity Transmission System*. IET Generation, Transmission & Distribution, Volume 5, Issue 5, pp. 540–550, May 2011.
15. Küçük, D., İnan, T., Salor, Ö., Demirci, T., Akkaya, Y., Buhan, S., Boyrazoğlu, B., Ünsar, Ö., Altıntaş, E., Haliloğlu, B., Çadircı, I., Ermiş, M. *An Extensible Database Architecture for Nationwide Power Quality Monitoring*. International Journal of Electrical Power and Energy Systems, Volume 32, Issue 6, pp. 559–570, July 2010.
16. Küçük, D., Salor, Ö., İnan, T., Çadircı, I. and Ermiş, M. *PQONT: A Domain Ontology for Electrical Power Quality*. Advanced Engineering Informatics, Volume 24, Issue 1, pp. 84–95, January 2010.
17. Küçük, D., Özgür, N. B., Yazıcı, A., and Koyuncu, M. *A Fuzzy Conceptual Model for Multimedia Data with a Text-based Automatic Annotation Scheme*. International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems, Volume 17, Supplementary Issue 1, pp. 135–152, August 2009.

#### National Journal Publications (in Turkish)

1. Küçük, D., Can, F. *Hukuki Metinlerin İşlenmesinde Yapay Zeka Teknolojilerinin Kullanımı*. Bilişim Hukuku Dergisi, Cilt 6, Sayı 1, Syf. 1–13, 2024.
2. Küçük, D., Özkan, M. B., Buhan, S., Demirci, T. *Enerji Bilişimi ve Geniş-ölçekli bir AR-GE Projesi Örneği*. Anahtar Dergisi, Cilt 34, Sayı 405, Syf. 28–30, 2022.
3. Özkan, M. B., Buhan, S., Küçük, D. *Türkiye’de Yenilenebilir Enerji Tahmini için Yapay Zeka Kullanımı*. Anahtar Dergisi, Cilt 34, Sayı 402, Syf. 25–27, 2022.

4. Küçük, D. *Güç Kalitesi Çalışmalarında Bilgisayar Mühendisliğinin Rolü*. EMO Bilimsel Dergi, Cilt 1, Sayı 2, Syf. 83–88, 2011.

### International Book Chapters

1. Küçük, D., Küçük, E. E. 2023. *Extending a Public Health Ontology in Turkish for Improved AI Applications*. In K. Kaushik, S. Dahiya, A. D. Dwivedi, S. Aggarwal (Eds.), *Revolutionizing Healthcare Through Artificial Intelligence and Internet of Things Applications*. IGI Global. doi:10.4018/978-1-6684-5422-0.ch003.
2. Küçük, D. 2023. *A Survey of Transformer-Based Stance Detection*. In L. A. Kumar, D. K. Renuka, S. Geetha (Eds.), *Deep Learning Research Applications for Natural Language Processing*. IGI Global. doi:10.4018/978-1-6684-6001-6.ch004.
3. Küçük, E. E., Küçük, D. 2022. *Using Natural Language Processing Techniques to Assess the Attitudes of Nursing Students during the COVID-19 Pandemic*. In A. Nayyar, S. Kumar, A. Agrawal (Eds.), *Applications of Computational Science in Artificial Intelligence*. IGI Global. doi:10.4018/978-1-7998-9012-6.ch001.
4. Küçük, D.. 2021. *Sentiment, Stance, and Intent Detection in Turkish Tweets*. In A. Sharaff, G. R. Sinha, S. Bhatia (Eds.), *New Opportunities for Sentiment Analysis and Information Processing*. IGI Global. doi:10.4018/978-1-7998-8061-5.ch011.
5. Ozkan, M. B., Küçük, D., Buhan, S., Demirci, T., and Karagoz, P. 2020. *Large-Scale Renewable Energy Monitoring and Forecast Based on Intelligent Data Analysis*. In V. Kharchenko, P. Vasant (Eds.), *Handbook of Research on Smart Computing for Renewable Energy and Agro-Engineering* (pp. 53-77). IGI Global. doi:10.4018/978-1-7998-1216-6.ch003

### International Conference Publications

1. Güvengir, U., Küçük, D., Keleş, M. 2025. *Learning-based Fine-grained Root Cause Classification for Power System Events*. In Proceedings of the 5th SEERC Conference. Sarajevo, Bosnia and Herzegovina.
2. Arslan, S. Y., Küçük, D., Cicekli, N. 2024. *Controversy Detection on Twitter with Dynamics and Content-Based Features*. In Proceedings of the 6th International Conference on Artificial Intelligence and Applied Mathematics in Engineering. Warsaw, Poland.
3. Ümütlü, E. E., Küçük, D., Cicekli, N. 2024. *Stance Intensity Detection on Social Media*. In Proceedings of the 6th International Conference on Artificial Intelligence and Applied Mathematics in Engineering. Warsaw, Poland.
4. Özyer, Y. B., Küçük, D., Cicekli, N. 2024. *Stance in Translation: English-To-Turkish Cross-Lingual Stance Detection*. In Proceedings of the 6th International Conference on Artificial Intelligence and Applied Mathematics in Engineering. Warsaw, Poland.
5. Numanoglu, A., Ateş, S., Cicekli, N., Küçük, D. 2024. *Empathify at WASSA 2024 Empathy and Personality Shared Task: Contextualizing Empathy with a BERT-Based Context-Aware Approach for Empathy Detection*. In Proceedings of the 14th Workshop on Computational Approaches to Subjectivity, Sentiment, & Social Media Analysis. Bangkok, Thailand.
6. Küçük, E. E., Küçük, D. 2024. *Enhancing a Public Health Ontology Using ChatGPT*. In Proceedings of the 7th International Health Sciences and Life Congress (IHSLC). Burdur, Türkiye.

7. Küçük, D., Buhan, S., Demirci, T., Özkan, M. B., Çınar, M. S., Altıntaş, E., Güvengir, U., Çelik, S. B., Mantaş, C. A., Yeniceci, M., Noyan, N., Yeşil, M. Güler, Ş. N., Yener, U., Bayındır, K. Ç. 2023. *An AI-based Scalable and Integrated Monitoring System for the Electrical Grid*, In Proceedings of the 4th SEERC Conference. İstanbul, Türkiye.
8. Güvengir, U., Küçük, D., Buhan, S., Mantaş, C. A., Yeniceci, M. 2023. *Classification of Power Quality Events in the Transmission Grid: Comparative Evaluation of Different Machine Learning Models*. In Proceedings of the 4th SEERC Conference. İstanbul, Türkiye.
9. Küçük, D., Can, F. 2022. *A Tutorial on Stance Detection*. In Proceedings of the 15th ACM International Conference on Web Search and Data Mining (WSDM), Arizona, USA.
10. Küçük, E. E., Küçük, D. 2021. *A Survey of Recent Studies on Automatic Fact Checking in Health-Related Tweets* (poster paper). In Proceedings of the 5th International and 23rd National Public Health Conference. Virtual Event, Turkey.
11. Küçük, E. E., Takır, S., Küçük, D. 2021. *Controversy Detection on Health-Related Tweets* (poster paper). In Proceedings of the 14th International Symposium on Health Informatics and Bioinformatics (HIBIT). Ankara, Turkey.
12. Küçük, D., Can, F. 2021. *Stance Detection: Concepts, Approaches, Resources, and Outstanding Issues*. In Proceedings of the 44th International ACM SIGIR Conference on Research and Development in Information Retrieval, Virtual Event, Canada.
13. Küçük, E., Küçük, E. E., Küçük, D. 2020. *Automatic Rumour Detection and Fact Checking for Enhanced Text-based Epidemic Intelligence* (poster paper). In Proceedings of the 13th International Symposium on Health Informatics and Bioinformatics (HIBIT). İstanbul, Turkey.
14. Arslan, Y., Küçük, D., Eren, S., Birtürk, A. 2018. *Clustering River Basins Using Time-Series Data Mining on Hydroelectric Energy Generation*. In Proceedings of the International Workshop on Data Analytics for Renewable Energy Integration (DARE) of ECML/PKDD 2018. Dublin, Ireland. W. L. Woon et al. (Eds.): DARE 2018, LNAI 11325, pp. 103–115.
15. Arslan, Y., Şimşek Dilbaz, A., Ertekin, Ş., Karagoz, P., Birtürk, A., Eren, S., Küçük, D. 2018. *Short-Term Electricity Consumption Forecast Using Datasets of Various Granularities*. In Proceedings of the International Workshop on Data Analytics for Renewable Energy Integration (DARE) of ECML/PKDD 2018. Dublin, Ireland. W. L. Woon et al. (Eds.): DARE 2018, LNAI 11325, pp. 116–126.
16. Arslan, Y., Küçük, D., Birtürk, A. 2018. *Twitter Sentiment Analysis Experiments Using Word Embeddings on Datasets of Various Scales*. In Proceedings of the International Conference on Applications of Natural Language to Information Systems (NLDB). Paris, France. M. Silberztein et al. (Eds.): NLDB 2018, LNCS 10859, pp. 40–47.
17. Küçük, E. E., Küçük, D. 2017. *A Survey of Public Health Surveillance on the Web* (poster paper). In Proceedings of the 1st International Health Sciences Congress of the Association of Thrace Universities. Edirne, Turkey.
18. Arslan, Y., Birtürk, A., Djumabaev, B., Küçük, D. 2017. *Real-time Lexicon-based Sentiment Analysis Experiments on Twitter with a Mild (More Information, Less Data) Approach*. In Proceedings of the IEEE International Conference on Big Data, Special Session on Intelligent Data Mining. Boston, USA.

19. Özkan, M. B., Güvengir, U., Küçük, D., Seçen, A. Ü., Buhan, S., Demirci, T., Bestil, A., Er, C., Karagöz, P. 2017. *Probabilistic Wind Power Forecasting By Using Quantile Regression Analysis*. In Proceedings of the International Workshop on Data Analytics for Renewable Energy Integration (DARE) of ECML/PKDD 2017. Skopje, Macedonia. W. L. Woon et al. (Eds.): DARE 2017, LNCS 10691, pp. 72–82.
20. Küçük, D. 2017. *Stance Detection in Turkish Tweets*. In Proceedings of the International Workshop on Social Media World Sensors (SIDEWAYS) of ACM Hypertext Conference. Prague, Czech Republic.
21. Küçük, D., Arıcı, N., Küçük, D. 2017. *Named Entity Recognition in Turkish: Approaches and Issues*. In Proceedings of the International Conference on Applications of Natural Language to Information Systems (NLDB). Liège, Belgium. F. Frasincar et al. (Eds.): NLDB 2017, LNCS 10260, pp. 176–181.
22. Küçük, E. E., Yapar, K., Küçük, D., Küçük, D. 2016. *Automatic Identification of Public Health Related Turkish Tweets*. In Proceedings of the 9th European Public Health Conference. Vienna, Austria. The European Journal of Public Health, Volume 26, Supplementary Issue 1, <http://dx.doi.org/10.1093/eurpub/ckw174.209>
23. Eren, S., Küçük, D., Ünlüer, C., Demircioğlu, M., Arslan, Y., Sönmez, S. 2015. *A Web-based Dispatcher Information System for Electricity Transmission Grid Monitoring and Analysis*. In Proceedings of the 9th International Conference on Electrical and Electronics Engineering (ELECO). Bursa, Turkey.
24. Er Köksoy, C., Özkan, M. B., Küçük, D., Bestil, A., Sönmez, S., Buhan, S., Demirci, T., Karagöz, P., Birtürk, A. 2015. *Performance Analysis of Data Mining Techniques for Improving the Accuracy of Wind Power Forecast Combination*. In Proceedings of the International Workshop on Data Analytics for Renewable Energy Integration (DARE) of ECML/PKDD 2015. Porto, Portugal. W. L. Woon et al. (Eds.): DARE 2015, LNAI 9518, pp. 44–55.
25. Küçük, D. and Küçük, D. 2015. *High-Precision Person Name Extraction from Turkish Texts Using Wikipedia*. In Proceedings of the 20th International Conference on Applications of Natural Language to Information Systems (NLDB). Passau, Germany. C. Biemann et al. (Eds.): NLDB 2015, LNCS 9103, pp. 347–354.
26. Küçük, D., Küçük, D. and Yazıcı, A. 2014. *On Fuzzy Extensions to Energy Ontologies for Text Processing Applications*. In Proceedings of the 29th International Symposium on Computer and Information Sciences (ISCIS). Krakow, Poland. T. Czachórski et al. (Eds.): Information Sciences and Systems 2014, pp. 87–95.
27. Küçük, D. and Steinberger, R. 2014. *Experiments to Improve Named Entity Recognition on Turkish Tweets*. In Proceedings of the EACL Workshop on Language Analysis for Social Media. Gothenburg, Sweden.
28. Zavarella, V., Küçük, D., Tanev, H., Hürriyetoglu, A. 2014. *Event Extraction for Balkan Languages*. In Proceedings of the Demonstrations at Conference of the European Chapter of the Association for Computational Linguistics (EACL). Gothenburg, Sweden.
29. Küçük, D., Jacquet, G. and Steinberger, R. 2014. *Named Entity Recognition on Turkish Tweets*. In Proceedings of the Language Resources and Evaluation Conference (LREC). Reykjavik, Iceland.
30. Balahur, A., Turchi, M., Steinberger, R., Perea-Ortega, J. M., Jacquet, G., Küçük, D., Zavarella, V. and El-Ghali, A. 2014. *Resource Creation and Evaluation for Multilingual Sentiment Analysis in Social Media Texts*. In Proceedings of the Language Resources and Evaluation Conference (LREC). Reykjavik, Iceland.

31. Küçük, D. 2013. *Utilizing Annotated Wikipedia Article Titles to Improve a Rule-Based Named Entity Recognizer for Turkish*. In Proceedings of the International Conference on Flexible Query Answering Systems. Granada, Spain. H.L. Larsen et al. (Eds.): FQAS 2013, LNAI 8132, pp. 683–691.
32. Özkan, M. B., Terciyanlı, E., Küçük, D., Buhan, S., Demirci, T., Yıldız, C., Günindi, M. 2013. *Verification of a Real Time Wind Power Monitoring and Forecast System for Turkey*. In Proceedings of the IET Renewable Power Generation Conference. Beijing, China.
33. Özkan, M. B., Küçük, D., Terciyanlı, E., Buhan, S., Demirci, T., Karagöz, P. 2013. *A Data Mining-Based Wind Power Forecasting Method: Results for Wind Power Plants in Turkey*. In Proceedings of the 15th International Conference on Data Warehousing and Knowledge Discovery. Prague, Czech Republic. L. Bellatreche and M.K. Mohania (Eds.): DaWaK 2013, LNCS 8057, pp. 268–276.
34. Yavuz, S. R., Küçük, D. and Yazıcı, A. 2013. *Named Entity Recognition in Turkish with Bayesian Learning and Hybrid Approaches*. In Proceedings of the 28th International Symposium on Computer and Information Sciences. Paris, France. E. Gelenbe and R. Lent (Eds.): Information Sciences and Systems 2013, LNEE 264, pp. 129–138.
35. Buhan, S., Terciyanlı, E., Özkan, M. B., Küçük, D., Haliloğlu, A. B., Demirci, T., Tuna, H., Ünsal, H. 2013. *Verification of a Very Short Term Wind Power Forecasting Algorithm for Turkish Transmission Grid*. In Proceedings of the IEEE International Conference on Power Engineering, Energy and Electrical Drives. İstanbul, Turkey.
36. Terciyanlı, E., Demirci, T., Küçük, D., Buhan, S., Özkan, M. B., Er Köksoy, C., Koç, E., Kahraman, C., Haliloğlu, A. B., Demir, T., Günindi, M., Gökmen, M., Karayılanoğlu, Z. 2013. *The Architecture of a Large-Scale Wind Power Monitoring and Forecast System*. In Proceedings of the IEEE International Conference on Power Engineering, Energy and Electrical Drives. İstanbul, Turkey.
37. Küçük, D. and Yazıcı, A. 2011. *Multilingual Video Indexing and Retrieval Employing an Information Extraction Tool for Turkish News Texts: A Case Study*. In Proceedings of the International Conference on Flexible Query Answering Systems (FQAS). Ghent, Belgium. H. Christiansen et al. (Eds.): FQAS 2011, LNAI 7022, pp. 128–136.
38. Küçük, D. and Yazıcı, A. 2011. *Improving Automatic Semantic Annotations of News Videos in Turkish through Web Alignment and Event Extraction*. In Proceedings of the International Symposium on Innovations in Intelligent Systems and Applications (INISTA). İstanbul, Turkey.
39. Küçük, D. and Yazıcı, A. 2010. *A Hybrid Named Entity Recognizer for Turkish with Applications to Different Text Genres*. In Proceedings of the 25th International Symposium on Computer and Information Sciences (ISCIS). London, UK.
40. Küçük, D. and Yazıcı, A. 2010. *A Text-based Fully Automated Architecture for the Semantic Annotation and Retrieval of Turkish News Videos*. In Proceedings of the IEEE International Conference on Fuzzy Systems. Barcelona, Spain.
41. Küçük, D. and Yazıcı, A. 2009. *Named Entity Recognition Experiments on Turkish Texts*. In Proceedings of the International Conference on Flexible Query Answering Systems (FQAS). Roskilde, Denmark. T. Andreasen et al. (Eds.): FQAS 2009, LNAI 5822, pp. 524–535.
42. Küçük, D. and Yazıcı, A. 2009. *Employing Named Entities for Semantic Retrieval of News Videos in Turkish*. In Proceedings of the 24th International Symposium on Computer and Information Sciences (ISCIS). Güzelyurt, Northern Cyprus.



43. Küçük, D. and Yazıcı, A. 2009. *Rule-based Named Entity Recognition from Turkish Texts*. In Proceedings of the International Symposium on Innovations in Intelligent Systems and Applications (INISTA). Trabzon, Turkey.
44. Küçük, D. and Yazıcı, A. 2008. *Identification of Coreferential Chains in Video Texts for Semantic Annotation of News Videos*. In Proceedings of the 23rd International Symposium on Computer and Information Sciences (ISCIS). İstanbul, Turkey.
45. Küçük, D., Salor, Ö., İnan, T., and Çadırcı, I. 2008. *Building an Ontology for Flexible Power Quality Querying*. In Proceedings of the 23rd International Symposium on Computer and Information Sciences (ISCIS). İstanbul, Turkey.
46. Küçük, D., Özgür, N. B., Yazıcı, A., and Koyuncu, M. 2008. *A Fuzzy Conceptual Model for Multimedia Data with Application to News Video Domain*. In Proceedings of the International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU). Malaga, Spain.
47. Küçük, D. and Turhan-Yöndem, M. 2007. *Automatic Identification of Pronominal Anaphora in Turkish Texts*. In Proceedings of the 22nd International Symposium on Computer and Information Sciences (ISCIS). Ankara, Turkey.
48. Tüfekçi, P., Küçük, D., Turhan-Yöndem, M., and Kılıçaslan, Y. 2007. *Comparison of a Syntax-Based and a Knowledge-poor Pronoun Resolution System for Turkish* (poster paper). In Proceedings of the 22nd International Symposium on Computer and Information Sciences (ISCIS). Ankara, Turkey.
49. Küçük, D., İnan, T., Boyrazoğlu, B., Buhan, S., Salor, Ö., Çadırcı, I., and Ermiş, M. 2007. *PQStream: A Data Stream Architecture for Electrical Power Quality*. In Proceedings of International Workshop on Knowledge Discovery from Ubiquitous Data Streams of ECML/PKDD. Warsaw, Poland.
50. Küçük, D. and Turhan-Yöndem, M. 2007. *A Knowledge-poor Pronoun Resolution System for Turkish*. In Proceedings of the 6th Discourse Anaphora and Anaphora Resolution Colloquium (DAARC). Lagos, Portugal.

#### National Conference Publications (in Turkish)

1. Küçük, D., Can, F. 2024. *Hukuki Metinlerin İşlenmesinde Yapay Zeka Teknolojilerinin Kullanımı*. III. Bilişim Hukuku Sempozyumu. Ankara, Türkiye.
2. Küçük, D., Buhan, S., Demirci, T., Özkan, M. B., Çınar, M. S., Altıntaş, E., Güvengir, Ü., Çelik, S. B., Uçar, S., Mantaş, C. A., Yeniceli, M., Noyan, N., Yeşil, M. Güler, Ş. N., Kayaoğlu, İ. E., Yener, U., Bayındır, K. Ç. 2022. *TEKİS: TEİAŞ Elektrik Güç Kalitesi ve Şebeke İzleme Sistemi*, Güç Sistemleri Konferansı. Ankara, Türkiye.
3. Küçük, D., Gezer, D. 2020. *Enerji Alanındaki Tahmin Problemleri için Makine Öğrenmesi ve Derin Öğrenme Yöntemlerinin Kullanılması*, Elektrik İletim ve Üretiminde Enerji Verimliliği Sempozyumu. Ankara, Türkiye.
4. Buhan, S., Küçük, D., Çınar, M. S., Malkoç, F., Yıldırım, M. U. 2020. *Akım Tahmin ve Havza Optimizasyon Modeli (ATHOM) Projesi: Güncel Gelişmeler*, Elektrik İletim ve Üretiminde Enerji Verimliliği Sempozyumu. Ankara, Türkiye.
5. Küçük, D., Küçük, D., Arıcı, N. 2016. *Türkçe Varlık İsmi Tanıma için bir Veri Kümesi*, IEEE 24. Sinyal İşleme, İletişim ve Uygulamaları Kurultayı (SIU). Zonguldak, Türkiye.

6. Bestil, A., Akay, D., Küçük, D. 2015. *Rüzgar Enerjisi için Tahmin Algoritmaları ve Kombinasyon Modelleri*, 35. Ulusal Yöneylem Araştırması ve Endüstri Mühendisliği Kongresi (YAEM). Ankara, Türkiye.
7. Küçük, D., Salor, Ö., Güder, M., Demirci, T., Akkaya, Y., Çadircı, I., Ermiş, M. 2009. *Türkiye Elektrik İletim Sisteminde Harmonik Bozulma ve Kırpışma Parametrelerinin Oluşturulan Güç Kalitesi Veritabanı Yapısıyla Değerlendirilmesi*, 3. EMO Enerji Verimliliği ve Kalitesi Sempozyumu (EVK). Kocaeli, Türkiye.
8. Demirci, T., Kalaycıoğlu, A., Salor, Ö., Pakhuylu, S., İnan, T., Küçük, D., Güder, M., Can, T., Akkaya, Y., Bilgen, S., Çadircı, I., Ermiş, M. 2008. *Türkiye Elektrik İletim Sistemi için Yurt Çapında Güç Kalitesi İzleme Ağı ve Veri Değerlendirme Merkezi: Güncel Gelişmeler*, IEEE 16. Sinyal İşleme, İletişim ve Uygulamaları Kullatayı (SIU). Didim, Türkiye.

### Preprints

1. Küçük, D., Can, F. 2025. *Computational Law: Datasets, Benchmarks, and Ontologies*. <https://arxiv.org/abs/2503.04305>
2. Küçük, D., Can, F. 2022. *Stance Detection and Open Research Avenues*. <https://arxiv.org/abs/2210.12383>
3. Küçük, D. 2022. *Monitoring Energy Trends through Automatic Information Extraction*. <http://arxiv.org/abs/2201.01559>
4. Küçük, D. 2021. *Stance Quantification: Definition of the Problem*. <https://arxiv.org/abs/2112.13288>
5. Küçük, D. 2019. *To What Extent are Name Variants Used as Named Entities in Turkish Tweets?*. <https://arxiv.org/abs/1912.07940>
6. Küçük, D., Can, F. 2019. *A Tweet Dataset Annotated for Named Entity Recognition and Stance Detection*. <https://arxiv.org/abs/1901.04787>
7. Küçük, D., Can, F. 2018. *Stance Detection on Tweets: An SVM-based Approach*. <https://arxiv.org/abs/1803.08910>
8. Küçük, D., Küçük, D. 2018. *OntoWind: An Improved and Extended Wind Energy Ontology*. <https://arxiv.org/abs/1803.02808>
9. Küçük, D. 2017. *Joint Named Entity Recognition and Stance Detection in Tweets*. <https://arxiv.org/abs/1707.09611>
10. Küçük, D., Demirci, T. 2016. *Enerji İzleme Yazılımları için Merkezi ve Genel bir Mimari (A Centralized and Generic Architecture for Energy Monitoring Software)*. <https://arxiv.org/abs/1611.00739>
11. Küçük, D., Küçük, D. 2015. *On TimeML-Compliant Temporal Expression Extraction in Turkish*. <https://arxiv.org/abs/1509.00963>

### Theses

1. Küçük, D., February, 2011. *Exploiting Information Extraction Techniques for Automatic Semantic Annotation and Retrieval of News Videos in Turkish*. Ph.D. Thesis, Middle East Technical University, Department of Computer Engineering.
2. Küçük, D., September, 2005. *A Knowledge-poor Pronoun Resolution System for Turkish*. M.Sc. Thesis, Middle East Technical University, Department of Computer Engineering.

ACADEMIC  
AUTHOR  
PROFILES

- <https://scholar.google.com.tr/citations?hl=tr&user=wPW5-KkAAAAJ>  
(Citations: 1745, h-index: 23)
- <https://scopus.com/authid/detail.uri?authorId=25652213800>  
(Citations: 916, h-index: 15)
- [https://researchgate.net/profile/Dilek\\_Kuecuk](https://researchgate.net/profile/Dilek_Kuecuk)  
(Citations: 1226)
- <https://dblp.uni-trier.de/pers/hd/k/K=uuml==ccedil==uuml=k:Dilek>
- <https://orcid.org/0000-0003-2656-1300>
- <https://github.com/dkucuk>
- <https://dergipark.org.tr/en/pub/@dilek.kucuk>