# Name Surname: Duygu Çelik Ertuğrul



**Date of birth: 1977**

**Title: Prof. Dr.**

**Education Status: PhD.**

**Institution:** Eastern Mediterranean University, Faculty of Engineering, Department of Computer Engineering, TRNC, Mersin-10, Turkey.

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| DEGREE | UNIVERSITY | DEPARTMENT | YEAR |
| Ph.D | **Eastern Mediterranean Üni.** | **Department of Computer Engineering** | **2005-2010** |
| MS | **Eastern Mediterranean Üni.** | **Department of Computer Engineering** | **2003-2005** |
| BS | **Eastern Mediterranean Üni.** | **Department of Computer Engineering** | **1999-2003** |
| BS | **Kocaeli Üni** | **Healthcare Services** | **1994-1998** |

# Academic Titles

Assistant Professor Date: 2010

Associate Professorship Date: 2017 (EMU), 2022 (T.C. UAK)

Professorship Date: 2022

# 1. SUPERVISED MASTER'S AND DOCTORAL THESES

# 1.1. Master's Theses

1. MS. Std. Hasan Karataş, “Brain Tumor Detection on X-Ray and MRI Images Using Fusion of Hybrid Learning Methods”, Computer Engineering, Graduate School and Research Institute, Tezli Yüksek Lisans, Eylül 2023, Gazimağusa, KKTC.
2. MS. Std. Soona Ahmed Abdullah, " Deep Learning-Based Recommendation System for Breast Cancer Diagnosis", Computer Engineering, M.Sc. and Research Institute, M.Sc. with Thesis, September 2020, Famagusta, TRNC.
3. MS. Std. Hiba Jlilati, "Semantic Based Database Schema Matching", Computer Engineering, M.Sc. and Research Institute, M.Sc. with Thesis, June 2020, Famagusta, TRNC.
4. MS. Std. Özgün Taçyıldız, A mobile-base Expert System to Obesity Tracking (MESOT) during Childhood and Adolescence", Computer Engineering, M.Sc. and Research Institute, M.Sc. with Thesis, March 2020, Famagusta, TRNC.
5. MS. Std. Maha Sailan, Automated Database Schema Matching Engine, Computer Engineering, M.Sc. and Research Institute, M.Sc. with Thesis, March 2020, Famagusta, TRNC.
6. MS. Std. Aidin Bazarchi, Recommendation Mobile Platform for Disorder Patients, Eastern Mediterranean University, Computer Engineering, M.Sc. and Research Institute, M.Sc. with Thesis, January 2019, Famagusta, TRNC
7. MS. Std. Moslem RafieiPour, Analyzing Current Fetus Risk Conditions Through Fetal Heart Rate (FHR) and Uterine Constructions (UC) Values By Using Machine Learning Algorithms, Eastern Mediterranean University, Computer Engineering, M.Sc. and Research Institute, M.Sc. with Thesis, January 2019, Famagusta, TRNC, *Analyzing Current Fetus Risk Conditions Through Fetal Heart Rate (FHR) and Uterine Constructions (UC) Values by Using Machine Learning Algorithms* (Master's thesis, Eastern Mediterranean University (EMU).
8. MS. Std. Mohammad Ali Haji Hasan Khonsari, Buzz Prediction in Social Media via Random Forest Approach, Eastern Mediterranean University, Computer Engineering, M.Sc. and Research Institute, M.Sc. with Thesis, January 2019, Famagusta, TRNC.
9. MS. Std. Basma Anber, Diagnosing Diabetic Retinopathy from Colored Fundus Images, Eastern Mediterranean University, Computer Engineering, Institute of Graduate Studies and Research, MS With Thesis, September 2017, Gazimağusa, North Cyprus
10. MS. Std. Mehmet Uğur Yüksel, Development of Fetal Heart Rate Monitoring System (FKHMS) and Mobile Integrated Doppler (M-Doppler) Device, Department of Computer Engineering, Computer Engineering Program, Istanbul Aydın University, Institute of Natural and Applied Sciences, MS With Thesis, July 2017, Istanbul, Turkey.
11. MS. Std. Pelin Hürcan Alpay, Mobile pediatric pre-examination and monitoring system, Department of Computer Engineering, Computer Engineering Program, Istanbul Aydın University, Institute of Natural and Applied Sciences, MS With Thesis, July 2017, Istanbul, Turkey.
12. MS. Std. Mehmet Akif ÇİFÇİ, A Search Service for Food-Based Mobile Applications Through Hadoop and Map Reduce Technology, Istanbul Aydın University, Institute of Natural and Applied Sciences, Department of Computer Engineering, Computer Engineering Program, MS With Thesis, 26 July 2016, Istanbul, Turkey.
13. MS. Std. Özlem DEMİRAL, Designing a Web Portal for the Education of Children with Autism, Istanbul Aydın University, Institute of Natural and Applied Sciences, Department of Computer Engineering, Computer Engineering Program, MS With Thesis, 26 July 2016, Istanbul, Turkey.
14. MS. Std. Necati İNAN, Ontology-Based Educational Activity Discovery System for Children with Pervasive Developmental Disorders (Non-Thesis Master's Degree), Istanbul Aydın University, Institute of Natural and Applied Sciences, Department of Computer Engineering, Information Supported Instructional Technologies, Master Without Thesis, 28 June 2012, Istanbul , Turkey.
15. MS.Std. Akın Eray ELVERİCİ, Agent-Based Educational Activity Discovery System for Children with Asperger's Syndrome with Semantic Web Approach Ontology Knowledge Base (Non-Thesis Master's Degree), Istanbul Aydın University, Institute of Natural and Applied Sciences, Department of Computer Engineering, Information Supported Instructional Technologies, Master Without Thesis, 28 June 2012, Istanbul, Turkey.

# 1.2. Ph.D. Theses

1. Selin Bitirim, Eastern Mediterranean University, Computer Engineering, EMU Research Institute, “Matching Free-Format Textual Résumés to Job Openings via Semantic Web” January 2019, Famagusta, TRNC, (cont.)
2. Samed Reyhanlı, Eastern Mediterranean University, Computer Engineering, EMU Research Institute, Named Entity Recognition based on BiLSTM-CNN Attention Model from Unstructured Electronic Patient Records in Turkish Language, (cont.)

# 2. PUBLICATIONS

# 2.1. Articles published in international peer-reviewed journals (SCI, SSCI, Arts & Humanities)

1. Ertuğrul, D. Ç., Bitirim, S., (2025). A systematic review on job recommender systems: Applications, techniques, open issues, and challenges, Journal of Big Data, Still Under Review.
2. Ertuğrul, D. Ç., Akcan, N., Bitirim, Y., (2025). Revolutionizing Pediatric Obesity Intervention Strategies: From Traditional Growth Reference Tools to AI-Enabled Pediatric Obesity Clinical Decision Support Systems, Computer Methods and Programs in Biomedicine, Still Under Review.
3. Ertuğrul, D. Ç., Bitirim, S., (2025). Semantic Interpretation in Job Recommendations: A Case of Ontology-Driven Resume Parsing, Acta Scientiarum Technolgy, Still Under Review.
4. Ertuğrul, D. Ç., Toygar, Ö., KARATAŞ, H., (2025). Brain Tumor Detection on X-Ray and MRI Images Using Fusion of Hybrid Learning Methods, Acta Scientiarum Technolgy, Still Under Review.
5. SCI-E, Ertuğrul, D. Ç., Akcan, N., Bitirim, Y., Koru, B., & Sevince, M. (2023). A knowledge-based decision support system for inferring supportive treatment recommendations for diabetes mellitus. Technology and Health Care, (Preprint), 1-24.
6. SCI-E, Duygu ÇELIK ERTUĞRUL, Soona AHMED ABDULLAH. (2022). A Decision-Making Tool for Early Detection of Breast Cancer on Mammographic Images. Tehnički vjesnik, 29(5), 1528-1536, DOI: https://doi.org/10.17559/TV-20211221131838
7. SCI-E, Çelik Ertuğrul, D., & Celik Ulusoy, D. (2022). A knowledge‐based self‐pre‐diagnosis system to predict Covid‐19 in smartphone users using personal data and observed symptoms. *Expert systems*, *39*(3), e12716, DOI: 10.1111/exsy.12716,.
8. SCI-E, Çelik Ertuğrul, D., Toygar, Ö., & Foroutan, N. (2021). A rule-based decision support system for aiding iron deficiency management. *Health Informatics Journal*, *27*(4), 14604582211066054.
9. SCI-E, Özgü Taçyıldız, and Duygu Çelik Ertuğrul. "A decision support system on the obesity management and consultation during childhood and adolescence using ontology and semantic rules." Journal of Biomedical Informatics (2020), Vol 110, p.103554. 2
10. SCI-E, Bitirim, Y., & Ertugrul, D. C. (2020). An analysis of user behaviors on the search engine results pages based on the demographic characteristics. *KSII Transactions on Internet and Information Systems (TIIS)*, *14*(7), 2840-2861.
11. SCI-E, Çelik Ertuğrul, Duygu, and Atilla Elçi. (2020). "A survey on semanticized and personalized health recommender systems.", Expert Systems, 37(4), e12519, <https://onlinelibrary.wiley.com/doi/pdf/10.1111/exsy.12519>
12. SCI, Duygu Çelik Ertuğrul, Yıltan Bitirim, Basma Anber. (2020). Decision Support System for Diagnosing Diabetic Retinopathy from Color Fundus Images. Journal of Imaging Science and Technology, 64(2), 20502-1.
13. SCI, Duygu Çelik Ertuğrul, Ali Hakan Ulusoy. "Development of a knowledge‐based medical expert system to infer supportive treatment suggestions for pediatric patients." ETRI Journal, 41(4), 515-527, ISSN: 1225-6463. 1
14. SCI-E, Parali, U., Zontul, M., & Ertugrul, D. C. (2019). Information Retrieval Using the Reduced Row Echelon Form of a Term-Document Matrix. Journal of Internet Technology, 20(4), 1037-1046.
15. SCI-E, Ulaş Çelenk, Duygu Çelik Ertuğrul, Metin Zontul, Osman Nuri Uçan, Self-Organizing Maps With Sliding Window (SOM+SW), Technical Gazzete - Tehnički vjesnik, DOI: 10.17559/TV-20151008153755, ISSN: 1330-3651, 24(6), 1729-1737, 2017.
16. SCI-E, Duygu Çelik Ertuğrul, FoodWiki: A Mobile App Examines Side Effects of Food Additives via Semantic Web, Journal of Medical Systems, Springer Journals, DOI: 10.1007/s1091601503726, ISSN: 0148-5598 (Print) 1573-689X (Online), WOS:000366122300007, 40, 2, 01 – 15, FEB 2016.10
17. SCI-E, Duygu Çelik, Towards a semantic-based information extraction system for matching resumes to job openings, Turkish Journal of Electrical Engineering & Computer Sciences, WOS:000368559000005, DOI: 10.3906/elk1304130, E-ISSN: 1303-6203. ISSN: 1300-0632, 24, 141 – 159, JAN 2016, TURKEY 1
18. SCI, Duygu Çelik, Atilla Elçi, Semantic composition of business processes using Armstrong’s Axioms, The Knowledge Engineering Review (KER) Cambridge Journals, ISSN: 0269-8889, eISSN: 1469-8005, WOS:000339566000009, 29, 2, 248 – 264, MAR 2014.
19. SSCI, Duygu Çelik, Atilla Elçi, Necati İNAN, Akın Eray ELVERİCİ, Alev ELÇİ, Educational Activity Discovery System for Individuals with Pervasive Developmental Disorders through Web Ontology Language (OWL), Education and Science, ISSN:1300-1337, WOS:000332750100006, 39, 171, 52 – 73, JAN 2014.
20. SCI, Duygu Çelik, Atilla Elçi, A broker-based semantic agent for discovering Semantic Web services through process similarity matching and equivalence considering quality of service, Science China Information Sciences, DOI: 10.1007/s1143201246971, ISSN: 1674733X, WOS:000314426900002, 56, 1, 01 – 24, 2013. 11
21. SCI-E, Duygu Çelik, Atilla Elçi, Towards a semantic-based workflow model to composition of OWL-S based atomic processes through process similarity matching and inferencing techniques, Journal of Internet Technology, ISSN: 16079264, WOS:000287064400016, 12, 1, 153 – 170, JAN 2011, TAIWAN. 1

# 2.2. Articles published in other international peer-reviewed journals

1. Duygu Çelik, FoodWiki: Ontology-driven Mobile Safety Food Consumption System, The Scientific World Journal, Hindawi Journals, ISSN: 1537-744X, Vol.2015, 01 – 22, 2015.
2. Duygu Çelik, Atilla Elçi, Ontology-based QoS Model for Appropriate Selection and Composition of Web Services, International Review on Computers and Software (IRECOS), Praise Worthy Prize, ISSN:1828-6003, 3, 2, 176 – 184, 2008.
3. Duygu Çelik, Atilla Elçi, Provision of Semantic Web Services through an Intelligent Semantic Web Service Finder, Multiagent and Grid Systems (MAGS), ISSN print: 1574-1702, Online: 1875-9076, 4, 3, 297-316, 2008.

# 2.3. Papers presented at international scientific meetings and published in the proceedings book

1. Selin Bitirim and Duygu Çelik Ertuğrul. (2022). Development Of A Resume Ontology Knowledge Base For Hybrid Job Recommendation Systems--Hibrit İş Öneri Sistemleri İçin Özgeçmiş Ontoloji Bilgi Tabanının Geliştirilmesi, 2.Nd Ahi Evran International Conference On Scientific Research, November 30 - December 1-2, 2022 Kırşehir Ahi Evran University, volume 3, p. 56, <https://www.ahievranconference.org/_files/ugd/614b1f_e8a9672841d34788a024c14a4952d512.pdf>
2. Y. Bitirim, S. Bitirim, D. Celik Ertugrul and O. Toygar, "An Evaluation of Reverse Image Search Performance of Google," 2020 IEEE 44th Annual Computers, Software, and Applications Conference (COMPSAC), 13-17 July 2020, Madrid, Spain, pp. 1368-1372, doi: 10.1109/COMPSAC48688.2020.00-65.
3. Tacyildiz, O., Ertugrul, D. C., Bitirim, Y., Akcan, N., & Elci, A. (2018, July). Ontology-Based Obesity Tracking System for Children and Adolescents. In 2018 IEEE 42nd Annual Computer Software and Applications Conference (COMPSAC)(pp. 329-334). IEEE.
4. Ertugrul, D. Ç., Elçi, A., & Bitirim, Y. (2017, July). An Intelligent Tracking System: Application to Acute Respiratory Tract Infection (TrackARTI). In Computer Software and Applications Conference (COMPSAC), 2017 IEEE 41st Annual (Vol. 2, pp. 137-142). IEEE. 1
5. Duygu Çelik Ertuğrul, Hakan Kanmaz, Mehmet Uğur Yüksel, Atilla Elçi, Mehmet Ertuğrul, Fetal Heart Rate Monitoring System (FHRMS), IEEE ESAS 2016: The 11th IEEE International Workshop on E-Health Systems and Semantic Web Held in conjunction with COMPSAC, IEEE 40th Annual Computer Software and Applications Conference (COMPSAC), 10–14 June, 2016, Atlanta, USD.1
6. Çifçi, M. A., Ertugrul, D. Ç., & Elçi, A. (2016, June). A Search Service for Food Consumption Mobile Applications via Hadoop and MapReduce Technology. In Computer Software and Applications Conference (COMPSAC), 2016 IEEE 40th Annual (Vol. 2, pp. 77-82). IEEE. 1
7. Duygu Çelik, Atilla Elçi, Rıdvan Akçiçek, Bora Gökçe, Pelin Hürcan, A Safety Food Consumption Mobile System through Semantic Web Technology, ESAS 2014: 9th IEEE International Workshop on Engineering Semantic Agents - Semantics, Agents and Intelligence, Held in conjunction with COMPSAC, 38th Annual, DOI: 10.1109/COMPSACW.2014.126, ISBN: 978-1-4799-3578-9, WOS:000352787700060, pp. 348 - 353, 21–25 July, 2014, Västerås, Sweden. 1
8. Duygu Çelik, Atilla Elçi, Rıdvan Akçiçek, Bora Gökçe, Pelin Hürcan, Mobile Pediatric Consultation and Monitoring System through Semantic Web Technology, ESAS 2014: 9th IEEE International Workshop on Engineering Semantic Agents - Semantics, Agents and Intelligence, Held in conjunction with COMPSAC, 38th Annual IEEE, ISBN: 978-1-4799-3578-9, WOS:000352787700060, pp. 354 - 359, 21–25 July, 2014, Vasteras, Sweden.
9. Parali, U., Zontul, M., Çelik, D. A New Information Retrieval Model Using Gauss-Jordan Method, Mathematical Applications in Modern Science, 19th International Conference on Applied Mathematics (AMATH '14), İstanbul, Turkey, December 15-17, 2014, ISBN: 978-1-61804-258-3, Link: http://www.wseas.us/e-library/conferences/2014/Istanbul/AMATH/AMATH-20.pdf
10. Duygu Çelik, Aşkın Karakaş, Gülşen Bal, Cem Gültunca, Atilla Elçi, Başak Buluz, Murat Can Alevli, Towards an Information Extraction System based on Ontology to Match Résumés and Jobs, ESAS 2013: 8th IEEE International Workshop on Engineering Semantic Agents - Semantics, Agents and Intelligence, Held in conjunction with COMPSAC, 37th Annual IEEE International Computers, Software, and Applications Conference (COMPSAC), ISBN: 978-0-7695-4987-3, WOS:000331223100057, pp. 333-338, July, 2014., Kyota, Japan. 2
11. Duygu Çelik, Atilla Elçi, Esra ÇALIK, Ayman Khalil, Development of Semantic Model and Information Exploration System for TV Media, ESAS 2012: The 7th IEEE International Workshop on Engineering Semantic Agent Systems, Held in conjunction with COMPSAC, the IEEE Signature Conference on Computers, Software, and Applications, July 16-20, 2012, İzmir, Turkey.
12. Duygu Çelik, Akın Eray ELVERİCİ, Atilla Elçi, Necati İNAN, Educational Activity Finder for Children with Pervasive Developmental Disorder through a Semantic Search System, In Proc. the Industrial Track, the 36th IEEE Signature Conference on Computers, Software, and Applications- COMPSAC 2012, DOI: 10.1109/COMPSAC.2012.84, ISBN: 978-0-7695-4736-7,WOS:000312376000084, 1, pp. 482-487, July 16-20, 2012, İzmir, Turkey.
13. Duygu Çelik, Atilla Elçi, Eray ELVERİCİ, Finding Suitable Course Material through a Semantic Search Agent for Learning Management Systems of Distance Education, Proc. 6th IEEE International Workshop on Engineering Semantic Agent Systems (ESAS 2011) in conjunction with the 35th Computer Software and Applications Conference (COMPSAC 2011) DOI: 10.1109/COMPSACW.2011.71, pp. 386-391, July 18 - 22, 2011, Munich, Germany.
14. Aslı Apaydın, Duygu Çelik, Atilla Elçi, Semantic Image Retrieval Model for Sharing Experiences in Social Networks DOI: http://dx.doi.org/10.1109/COMPSACW.2010.11, 5th IEEE International Workshop on Engineering Semantic Agent Systems (ESAS 2010) conduction with the 34th Computer Software and Applications Conference (COMPSAC 2010), Sponsored by IEEE Computer Society, July 19-23, 2010, Seoul, South Korea.
15. Duygu Çelik, Atilla Elçi, Ontology-based QoS Queuing Model for Selection of Web Services Servers, 5th IEEE International Workshop on Engineering Semantic Agent Systems (ESAS 2010) conduction with the 34th Computer Software and Applications Conference (COMPSAC 2010), July 19-23, 2010, Seoul, South Korea.
16. Duygu Çelik, Atilla Elçi, Semantic Web Enabled Composition of Semantic Web Services, In Proc. 4th IEEE International Workshop on Engineering Semantic Agent Systems (ESAS 2009) in conjunction with 33rd COMPSAC, ISBN: 978-1-4244-4525-7, WOS:000274261400112, pp. 719 - 724, July 20 - 24, 2009, Seattle, WA, USA.
17. Duygu Çelik, Atilla Elçi, Semantic QoS Model for Extended IOPE Matching and Composition of Web Services, In Proc. 1st IEEE International Workshop on Semantics for Business Process Management (SemBPM 2008) COMPSAC '08. 32nd Annual IEEE International, IEEE Computer Society Press DOI 10.1109/COMPSAC.2008.208., pp. 993 – 998, August 2008, Turku, Finland.
18. Duygu Çelik, Atilla Elçi, Discovery and Scoring of Semantic Web Services Based on Client Requirement(s) through a Semantic Search Agent, Proc. IEEE International Workshop on Engineering Semantic Agent Systems (ESAS 2006) conj. with 30th COMPSAC Annual International Computer Software & Applications Conference-IEEE Computer Society Press, ISBN: 0-7695-2655-1, WOS:000241645100051, 2, pp. 273-278, 17-21 September 2006, Chicago, Illinois, USA. 5
19. Duygu Çelik, Atilla Elçi, A Semantic Search Agent Discovers Suitable Web Services According to an E-Learning Client Demand, Proc. 6th International educational Technology Conference (IETC 2006), 1, pp. 416-424, 19-21 April 2006, Gazimagusa, TRNC.
20. Duygu Çelik, Atilla Elçi, Searching Semantic Web Services: An intelligent agent approach using semantic enhancement of client terms and Matchmaker Algorithm, International Conference on Intelligent Agents, Web Technologies and Internet Commerce- IAWTIC 2005 Proceeding: IEEE Publ., ISBN: 0-7695-2504-0, WOS:000239915100151, pp. 916- 921, 28-30 November 2005, Vienna, Austria 1
21. Duygu Çelik, Atilla Elçi, A Semantic search agent approach: Finding appropriate semantic Web services based on user request term(s), Enabling Technologies for the New Knowledge Society, ITI 3rd International Conference on Information & Communication Technology (ITICT 2005) 10.1109/ITICT.2005.1609659, pp. 675- 687, 5-6 December 2005, Cairo, Egypt. 1

# 2.4. International Books or Book Chapters Authored

1. Giritli, A., Ulusoy, D. Ç., & Ertuğrul, D. Ç. (2025). Charting New Frontiers: Artificial Intelligence Driving Sector Advancements. In *Future of Digital Technology and AI in Social Sectors* (pp. 395-432). IGI Global.
2. Ertuğrul, D. Ç., & Bitirim, S. (2025). EchoCareer: Enhancing Job Recommendations for the Hearing-Impaired Community With Semantic Technology. In *Cutting-Edge Technologies for Business Sectors* (pp. 295-334). IGI Global.
3. Ertuğrul, D. Ç., & Elçi, A. (2022). Educational activity suggestion system of children with pervasive developmental disorder for guiding education and training staff activities. In Research Anthology on Inclusive Practices for Educators and Administrators in Special Education (pp. 448-471). IGI Global. https://www.igi-global.com/chapter/educational-activity-suggestion-system-of-children-with-pervasive-developmental-disorder-for-guiding-education-and-training-staff-activities/292896.
4. Ertuğrul, D. Ç., & Elçi, A. (2018). Educational Activity Suggestion System of Children With Pervasive Developmental Disorder for Guiding Education and Training Staff Activities. In Handbook of Research on Contemporary Perspectives on Web-Based Systems (pp. 142-165). IGI Global, DOI: 10.4018/978-1-5225-5384-7.ch008. https://www.igi-global.com/chapter/educational-activity-suggestion-system-of-children-with-pervasive-developmental-disorder-for-guiding-education-and-training-staff-activities/203422.
5. Çelenk, U., Ertuğrul, D. Ç., Zontul, M., Elçi, A., & Uçan, O. N. (2018). Dynamic quota calculation system (DQCS): Pricing and quota allocation of telecom customers via data mining approaches. In *Handbook of Research on Contemporary Perspectives on Web-Based Systems* (pp. 434-459). IGI Global, DOI: 10.4018/978-1-5225-5384-7.ch019.
6. International Book Chapter: Duygu Çelik, Atilla Elçi, Ontology-based Matchmaking and Composition of Business Processes, Book Chapter on Semantic Agent Systems-Foundations and Applications, Atilla Elçi, Mamadou T. Kone, and Mehmet A. Orgun (Editors:), V. 344 in Studies in Computational Intelligence Series by Springer-Verlag, Chapter 7, pp: 133-157,2011, ISBN 978-3-642-183072
7. International Book Chapter: Duygu Çelik, Atilla Elçi, An Ontology-Based Information Extraction Approach for Résumés, Book, Lecture Notes in Computer Science, Volume 7719, 2013, Joint International Conference, ICPCA/SWS 2012, Istanbul, Turkey, November 28-30, 2012, Revised Selected Papers, Editors: Qiaohong Zu, Bo Hu, Atilla Elçi, ISBN: 978-3-642-37014-4 (Print), 978-3-642-37015-1 (Online), DOI 10.1007/978-3-642-37015-1, Chapter 15, pp. 165-179, 2013, http://link.springer.com/book/10.1007%2F978-3-642-37015-1.
8. International Book Chapter: Elena Railean, Atilla Elçi, Duygu Çelik, Alev Elçi, Metasystems Learning Design Approach for STEM Teaching and Learning, STEM Education: An Overview of Contemporary Research, Trends, and Perspectives, Cycloid Publications, ISBN:978-0-9966741-1-9, Chapter 3, pp. 54-83, 2016, Nebraska 68022, USA.
9. International Book Chapter: Atilla Elçi, Alev Elçi, Duygu Çelik Semantic Modelling for E-Learning Coordination, Revolutionizing Modern Education through Meaningful Implementation. 170116-024253, IGI Global Chapter:11, DOI: 10.4018/978-1-5225-0466-5.ch011, Chapter 11, pp. 191-225, 2016.
10. International Book: Duygu Çelik, Atilla Elçi, Composition of OWL-S based Atomic Processes, LAP LAMBERT Academic Publishing GmbH & Co., https://www.lap-publishing.com/catalog/details//store/gb/book/978-3-8465-5140-0/composition-of-owl-s-based-atomic-processes, ISBN: 978-3-8465-5140-0, 7719, EAN: 9783846551400, Number of pages: 176, 2011-11-25, Saarbrücken, Germany.

# 2.5. Articles Published in National Peer-Reviewed Journals

1. Nat. J., Bitirim, S., & Ertuğrul, D. Ç. (2024). Öneri Sistemlerinde Kullanılan Performans Metriklerinin Filtreleme Teknolojilerine Göre Değerlendirilmesi: İş Öneri Sistemleri Alanı Üzerine Bir Araştırma Çalışması. *Kahramanmaraş Sütçü İmam Üniversitesi Mühendislik Bilimleri Dergisi*, *27*(3), 706-725.
2. Nat. J., Bitirim, S., & Ertuğrul, D. Ç. (2024). İnsan Kaynaklarında Etkili İşe Alım Süreci İçin Türkçe Bir Ontoloji Geliştirilmesi. *Kahramanmaraş Sütçü İmam Üniversitesi Mühendislik Bilimleri Dergisi*, *27*(2), 401-414.
3. Nat. J., Duygu Çelik Ertuğrul, Demet Çelik Ulusoy, Ayçin Giritli. (2023). "Artificial Intelligence: A Promising Technology for Sectoral Development", "Artificial Intelligence and Robotics", MÜKAD Magazine, Issue: 8, 14.07.2023, <https://online.fliphtml5.com/hpepq/eosp/#p=1>
4. Nat. J., Ertugrul, D. C., Zontul, M., Bitirim, Y., & Taymaz, G. TrackARTI, (2018). Mobile Health Tracking System for Pediatric Patients with Acute Respiratory Infection. Aksaray University Journal of Science and Engineering, 2(1), 73-94.
5. Nat. J., Dinçer, S., Dincer, S., Yıldız, E. R., Yildiz, E. R., Bitirim, Y., Bitirim, Y., ... & Ertugrul, D. C. (2018). A Study on Smart Park System Mobile Applications Retrievable by The Users Over Google Play Store. *Akıllı Sistemler ve Uygulamaları Dergisi*, *1*(1), 75-80.
6. Nat. J., Duygu ÇELİK ERTUĞRUL, Pelin HÜRCAN ALPAY (2017). Developing Ontology-Based Mobile Fever Monitoring and Consultation System for Pediatric Patients. Polytechnic Journal, 20(3), 543-556. WOS:000447837400006
7. Nat. J., ÇİFÇİ, M. A., & ERTUĞRUL, D. Ç. (2017). A Search Service for Food-based Mobile Applications through Hadoop and Mapreduce Technology. Cumhuriyet University Faculty of Arts and Sciences Journal of Science,38(1), 79-94.
8. Nat. J., Duygu Çelik, Atilla Elçi, Intelligent Semantic Network Service Seeker, Journal of Turkish Informatics Computer Science and Engineering Foundation (TBV BBMD), ISSN: 1305-8991, 2, 1, 31-42, 2006, http://www.bmbb.info/dergi/index.php/dergi/article/view/20/16
9. Nat. J., Duygu Çelik, Atilla Elçi, Semantics Based Workflow Model on the Combination of OWL-S Based Atomic Processes, Çankaya University Journal of Science and Engineering - CUSJE, ISSN: 1309- 6788, 8, 1, 75-98, 2011, Ankara, Turkey http://cujse.cankaya.edu.tr/archive/8\_1/07\_cujse\_10025.pdf

# 2.6. Papers presented at national scientific meetings and published in the proceedings book

1. Mahmut SEVİNCE, Yıltan BİTİRİM, Duygu ÇELİK ERTUĞRUL, Neşe AKCAN, - Newly Developed Follow-Up System: Health on Dıabetes In Northern Cyprus, M-SAĞLIK, 3. Diyabet Teknolojileri Sempozyumu, 27-29 Mayıs 2021
2. Samet Dinçer, Emre Rifat Yıldız, Yıltan Bitirim and Duygu Çelik Ertuğrul. A Study on Smart Parking System Mobile Applications Accessible to Users Through Google Play Store, Innovations and Applications in Smart Systems (ASYU) Conference, Alaaddin Keykubat University, Izmir Katip Çelebi University and Yıldız Technical University, 5 - 7 October 2017, Alanya.
3. Mehmet Uğur Yüksel ve Duygu Çelik Ertuğrul, (2017). UBICTUS, 2. National Biomedical Device Design and Manufacturing Symposium. Development of a Mobile Integrated Doppler Device for Fetal Heart Rate Monitoring System (mDoppler). Istanbul, Turkey, pp.10-17.
4. Duygu Çelik, Atilla Elçi, Rıdvan Akçiçek, Esra Ekren, Pelin Hürcan, Kübra Boz, A Safety Food Consumption Mobile System (SFCMS) through Semantic Web technology, TIPTEKNO'14, Medical Technologies National Congress, pp.172-175, 25 – 27 September 2014, Cappadocia, Turkey.
5. Duygu Çelik, Atilla Elçi, Rıdvan Akçiçek, Esra Ekren, Pelin Hürcan, Kübra Boz, Mobile Pediatric Consultation and Monitoring System through Semantic Web technology, TIPTEKNO'14, Medical Technologies National Congress, pp.176-179, 25 – 27 September 2014, Cappadocia, Turkey.
6. Duygu Çelik, Atilla Elçi, Esra ÇALIK, Development of Semantic Data Model and Information Discovery System for TV Media/Media, Çankaya University MTS5- 5th Engineering and Technology Symposium Program, pp.134-140, April 26-27, 2012, Ankara, Turkey.
7. Duygu Çelik, Atilla Elçi, Candan Çelik, Akın Eray Elverici, Necati İnan , Semantic Resource Scanning Agent for Distance Education Course Management System, Çankaya University 4th Engineering and Technology Symposium (MTS4 2010), April 28-29, 2011, Ankara, Turkey.
8. Duygu Çelik, Atilla Elçi, Semantics Based Workflow Model on the Combination of OWL-S Based Atomic Processes, Çankaya University 3rd Engineering and Technology Symposium (MTS3 2010), April 29-30, 2010, Ankara, Turkey.

# 3. TÜBITAK & SANTEZ & BAP R&D PROJECTS

1. Project Supervisor, Project Title: “Increasing User Click-Through Rates on Huawei Petal Ads with an LLM-Supported Recommendation System: Developing AI-Based Advertising Management Strategies” in EN,” LLM Destekli Öneri Sistemi ile Huawei Petal Ads'te Kullanıcı Tıklama Oranını Artırma: Yapay Zeka Tabanlı Reklam Yönetim Stratejileri Geliştirme” in TR, The Scientific and Technological Research Council of Turkey (TÜBİTAK), Program code: 1505, R&D Project time: 2024-2027, Yürütücü Kuruluş: EMU, Müşteri Kuruluş: Huawei Technologies Co., Ltd. A.Ş., Under Review.
2. Academic Advisor, The Scientific and Technological Research Council of Turkey (TÜBİTAK), Program code: 1505 University-Industry Cooperation Support Program, Project Title: “Restoration Projects Using Artificial Intelligence” in EN, Proje Title: “Yapay Zekâ ile Restorasyon Projelerinin Yapılması” in TR, Executing Institution: İstinye University and Eastern Mediterranean U.,, Customer Institution: ARTMAP Information Architecture Mapping Industry and Trade Inc., Project time: 2024-2027., TÜBİTAK 1505 Üniversite-Sanayi İşbirliği Destek Programı, Yürütücü Kuruluş: İstinye ve DAÜ Üniversiteleri, Müşteri Kuruluş: ARTMAP Bilişim Mimarlık Haritacılık San. ve Tic. A.Ş, 2024-2027, Under Review.
3. Project Title: “Holter ECG Data Analysis with Big Data and Artificial Intelligence”, In Turkish: “Büyük Veri ve Yapay Zeka ile Holter EKG Cihazı Analizi Projesi” (Academic Advisor: Assoc. Prof. Dr. Duygu Çelik Ertuğrul, Assoc. Prof. Dr. Adnan Acan), Project Owner: Algomedi Information Technologies, Budget: 200K TL, Funded by: The Scientific and Technological Research Council of Turkey (TÜBİTAK), TÜBİTAK 1507 R&D Start-up Support Program, ProjeNo: 7201382, ProjeTime: 01/10/2020 - 01/01/2022.
4. Project Title: “Integrated Access Control Intrusion Detection System”, In Turkish: “Entegre Geçiş Kontrol İhlal Uyari Sistemi” (Academic Advisor: Assoc. Prof. Dr. Duygu Çelik Ertuğrul, Assoc. Prof. Dr. Adnan Acan), Ortaklar: Eastern Mediterranean University, EGT Control Technologies Industry and Trade A.Ş., Budget: 500K TL, Funded by: Türkiye Bilimsel ve Teknolojik Araştırma Kurulu(TÜBİTAK), TÜBİTAK Hibe Programı: TÜBİTAK 1507 R&D Start-up Support Program, ProjeNo: 7180095, ProjeTime: 01.01.2018 - 30.07.2019.
5. Project Title: LMS4Autism: "Learning Management System for Individuals with Diagnosed Autism Spectrum Disorder in TRNC", In Turkish: LMS4Autism: “KKTC'de Otizm Spektrum Bozukluğu Tanısı Konulan Bireylere Yönelik Öğrenme Yönetim Sistemi” (Academic Advisor: Assoc. Prof. Dr. Duygu Çelik Ertuğrul), Budget: 234K TL, EMBASSY OF THE REPUBLIC OF TURKEY- Development and Economic Cooperation Office Project Support, BAP project, Project Time: 01.01.2019 - 31.12.2019, TRNC, Turkey.
6. Project Title: "Pediatric Wristband Hardware and Vital Values Mobile Tracking System", In Turkish: Pediatrik Bileklik Donanımı ve Vital Değerler Mobil Takip Sistemi (Academic Advisorlar: Assoc. Prof. Dr. Duygu Çelik Ertuğrul, Assoc. Prof. Dr. Adnan Acan), Budget: 156.5K TL, EMBASSY OF THE REPUBLIC OF TURKEY- Development and Economic Cooperation Office Project Support, BAP project, Project Time: 01.01.2019 - 31.12.2019, TRNC, Turkey.
7. Project Title: “An Intelligent Tracking System: application to Acute Respiratory Tract Infection (TrackARTI)” (Idea owner & Partnership and Academic Advisor: Asst.Prof.Dr.Duygu Çelik Ertuğrul), TÜBİTAK Grant Program: TÜBİTAK 2510-Joint Research Project: Turkey ( TÜBİTAK) and Tunis(MHESR), Partners: Turkish Side: Prof. Dr. Atilla Elçi (Co-director), Asst.Prof.Dr. Duygu Çelik Ertuğrul (Danışman), Asst.Prof.Dr. Neşe Akcan (Pediyatrist), MS.Std. Gökhan Taymaz(Araştırmacı), Tunisian Side: Assoc. Prof. Dr. Hajer Baazaoui Zghal (Co-director), Prof. Dr. Narjes Bellamine, Dr. Ines Gam, Project No: TBD, Project Time: 21.05.2017 - 31.08.2019, Ankara, Turkey.
8. Project Title: “Pediatric Wearable Device Design and Vital Values Tracking System of Pediatric Patients” (Idea owner & Partnership and Academic Advisor: Asst. Prof. Dr. Duygu Çelik Ertuğrul), Partners: Semantica Internet and Software Services Trd. Ltd. Co. & Acıbadem Health Group, Budget: 1.000.000 TL, Supported by: The Scientific and Technological Research Council of Turkey (TÜBİTAK), TÜBİTAK Grant Program: TÜBİTAK 1511- Priority Areas Research Technology Development & Innovation Projects Support Program, Project No: 1150538, Project Time: 01.01.2016 - 30.06.2017, Ankara, Turkey, 2016.
9. Project Title: “Fetal Heart Rate Monitoring System (FHRMS) and Mobile Integrated Doppler Device (m - Doppler) Project” (Idea owner & Partnership and Project Manager: Asst. Prof. Dr. Duygu Çelik Ertuğrul), Partners: Istanbul Aydin University and Acıbadem Health Group, Budget: 132.000 TL, SAN - TEZ Ministry of Science, Industry and Technology, Project No: 0763.STZ.2014, Project Time: 01.01.2015 - 31.03.2016, Ankara, Turkey, 2014.
10. Project Title: “Ontology-based Remote Pediatric Consultation and Monitoring System that Suggests Supportive Medical Steps for Parents via Inferencing” (Idea owner & Partnership and Academic Advisor: Asst. Prof. Dr. Duygu Çelik Ertuğrul), Partners: Semantica Internet and Software Services Trd. Ltd. Co., Istanbul Aydin University, and Acıbadem Health Group, Budget: 677.000 TL, Supported by: The Scientific and Technological Research Council of Turkey (TÜBİTAK), Grant Program: TÜBİTAK 1501 Industry Research & Development Support Program, Project No: 3140242, Project Time: 01.04.2014- 30.06.2015, Ankara, Turkey, 2014.
11. Project Title: “FoodWiki: Ontology-driven Mobile Safety Food Consumption System” (Idea Owner &Partnership and Academic Advisor: Asst. Prof. Dr. Duygu Çelik Ertuğrul), Partners: Semantica Internet and Software Services Trd. Ltd. Co., Istanbul Aydin University, and Acıbadem Health Group, Budget: 526.000 TL, Supported by: The Scientific and Technological Research Council of Turkey (TÜBİTAK), Grant Program: TÜBİTAK 1501 Industry Research & Development Support Program, Project No: 3140417, Project Time: 01.07.2014 - 30.09.2015, Ankara, Turkey, 2014.
12. Project Title: “Valuable Goods and Money Transfer Management Profitability Optimization Decision Support System Development via Semantic Web Technology”, In Turkish: “Semantic Web Teknolojisi ile Değerli Eşya ve Para Nakil Yönetimi Karlılık Optimizasyon Karar Destek Sistemi Geliştirilmesi” (Academic Advisor: Asst. Prof. Dr. Duygu Çelik Ertuğrul), Partners: Semantica Internet and Software Services Trd. Ltd. Co., Istanbul Aydin University, and Erk Technology Trd. Ltd. Co., Budget: 424.070,38 TL, Supported by: The Scientific and Technological Research Council of Turkey (TÜBİTAK), TÜBİTAK Grant Program: TÜBİTAK 1507 RE-DE Startup Support Program, Project No: 7140490, Project Time: 01.11.2014 - 30.04.2016, Ankara, Turkey, 2014.
13. Project Title: “For multi-location organizations; Project Management Reporting and Decision Support System Development”, In Turkish: “Çok Lokasyonlu Organizasyonlara Yönelik; Proje Yönetimi Raporlama ve Karar Destek Sisteminin Geliştirilmesi” (Academic Advisor: Asst. Prof. Dr. Duygu Çelik Ertuğrul), Partners: Istanbul Aydin University and Compello Tic. Ltd. Co, and Turktek Tech. Development and Transfer Center Ltd. Co, Supported by: The Scientific and Technological Research Council of Turkey (TÜBİTAK), TÜBİTAK Program: TÜBİTAK 1507 RE-DE Startup Support Program, Project No:7131323, Project Time: 01.12.2013 - 31.05.2015, Ankara, Turkey, 2014.
14. Project Title: “ALERJİK BİREYLERE ÖZGÜ GÜVENLİ GIDA TÜKETİMİNE YÖNELİK ANLAM TABANLI AKILLI BİLGİ SİSTEMİ”, Proje Numarası : 2120357, Project owner: Semantı̇ca Internet and Software Services Trd. Ltd. Co., Project Manager & Idea ownership: Asst.Prof.Dr.Duygu Çelik Ertuğrul, Budget: 100.000 TL (Grant Support), Supported by: The Scientific and Technological Research Council of Turkey (TÜBİTAK), TÜBİTAK Grant Program: TÜBİTAK 1512 Entrepreneurship Progressive Support Program, Project No: 2120357, Project Time: 01.07.2013 - 31.06.2014, Ankara, Turkey, 2013.
15. Project Title: “Document - based Semantic Information Extraction System from Turkish Résumés through Ontology” (Academic Advisor: Asst.Prof.Dr. Duygu Çelik Ertuğrul) Partners: Kariyer.net Electronic Publishing and Communications Services Incorporated Company and Istanbul Aydın Üni., Budget: 544.951,95 TL, Project Time: 01.05.2011-31.12.2012, Project No: 3110289, Supported by: The Scientific and Technological Research Council of Turkey (TÜBİTAK), Grant Program: TÜBİTAK 1501 Industry Research & Development Support Program, Ankara, Turkey, 2012.
16. Project Title: “Dynamically examining the charging algorithms of data usage and quota systems in GSM systems” – Academic Advisor & Associate Researcher at the Project: Asst. Prof. Dr. Duygu Çelik, Avea Communication Services Inc., & Istanbul Aydin Uni, Budget: 230.000 TL, SAN - TEZ Ministry of Science, Industry and Technology, Project No: 00874.STZ.2011–1, Project Time: 2011- 2013, Ankara, Turkey, 2011.
17. Project Title: “Provision of Semantic Web Services through an Intelligent Semantic Web Service Finder”, supported by Eastern Mediterranean University, ‘A’ Type Project, Project no: BAP- A – 0720, Budget: $6.200, Associate Researcher, Project Time: 01.02.2008 - 01.06.2010, Famagusta, Mersin-10, TRNC, TURKEY.

# 4. ADMINISTRATIVE DUTIES

1. 2016-Present, Curriculum Committee Member, Eastern Mediterranean University, Department of Computer Engineering
2. 2016- Present, Member of the Social Committee, Eastern Mediterranean University, Department of Computer Engineering
3. 2016- Presently, Graduation Projects Coordinator of EMU CMPE, CMSE and BLGM Programs, Eastern Mediterranean University, Department of Computer Engineering.

# 5. MEMBERSHIPS TO SCIENTIFIC AND PROFESSIONAL ORGANIZATIONS

1. Association for Computing Machinery (ACM)
2. IEEE & IEEE Computer Society.

# 6. AWARDS

1. Full Scholarship, Ph.D., Eastern Mediterranean University, 2005-2010.
2. Full Scholarship, Master's Degree, Eastern Mediterranean University, 2003-2005.
3. Full Scholarship, BS Degree, Eastern Mediterranean University, 1999-2003.
4. "Semantic-Based Smart Information System for Safe Food Consumption for Allergic Individuals" – Project No: 2120357, TÜBİTAK 1512 Entrepreneurship Progressive Support Program, R&D studies with 100.000 TL Grant Support Semantica Tic.Ltd.Şti. The project was successfully completed in 2014 (Project Support Period: 01.07.2013-31.06.2014).

# 7. UNDERGRADUATE & GRADUATE LEVEL COURSES TAUGHT IN LAST 2 YEARS

**2017-2018 Fall**

* BLGM 416 - Object Oriented Programming and Graphical User Interface, Theoretical (4 h/w), Practical (2)
* CMPE 412 Software Engineering, Teoric (4 h/w), Symbol (2 h/w)
* CMSE 473 Software Process & Project Management, Teorik (4 h/w), Pratik (2 h/w)

**2017-2018 Spring**

* BLGM 412 Software Engineering, Theoretical (4 h/w), Practical (2 h/w)
* CMSE 322- Software Design, Teoric (4 h/w), Symbol (2 h/w)

**2018-2019 Fall**

* CMSE 491 Selected Topics in Software Engineering I, Teorik (4 h/w), Pratik (2 h/w)
* CMPE 583 Web Semantics, Teorik (3 h/w)
* CMSE 473 Software Process & Project Management, Teorik (4 h/w), Pratik (2 h/w)

**2018-2019 Spring**

* BLGM 412 Software Engineering, Theoretical (4 h/w), Practical (2 h/w)
* CMSE 322- Software Design, Teoric (4 h/w), Symbol (2 h/w)

**2019-2020 Fall**

* CMSE 201 Fundamentals of Software Engineering, Teorik (4 h/w), Pratik (2 h/w)
* CMPE 412 Software Engineering, Teoric (4 h/w), Symbol (2 h/w)
* CMSE 473 Software Process & Project Management, Teorik (4 h/w), Pratik (2 h/w)

**2020-2021 Fall**

* CMSE 201 Fundamentals of Software Engineering, Teorik (4 h/w), Pratik (2 h/w)
* CMSE 473 Software Process & Project Management, Teorik (4 h/w), Pratik (2 h/w)

**2020-2021 Spring**

* CMSE 201 Fundamentals of Software Engineering, Teorik (4 h/w), Pratik (2 h/w)
* CMSE 322- Software Design, Teoric (4 h/w), Symbol (2 h/w)

**2021-2022 Fall**

* CMSE 201 Fundamentals of Software Engineering, Teorik (4 h/w), Pratik (2 h/w)
* CMSE 473 Software Process & Project Management, Teorik (4 h/w), Pratik (2 h/w)

**2021-2022 Spring**

* CMSE 322- Software Design, Teoric (4 h/w), Symbol (2 h/w)
* CMSE 514 Web Technologies and Services, Teorik (3 h/w)

# 8. RESEARCH TOPICS

* Web Technologies & Semantic Web (Web 3.0)
* Data Mining and Machine Learning
* M-Health & E-health, E-learning, E-commerce solutions.
* Recommender Systems
* Knowledge-Based Expert Systems
* Big Data
* Exploration and Composition of Semantic Web Services
* Semantic Search Tools
* Semantic Social Networks on the Web
* Special Purpose Microprocessors
* Artificial Intelligence Healthcare Solutions, CDSS.

# PH.D. THESIS TOPIC

In his doctoral study, the Inference-based Semantic Composition Agent (SCA) framework of atomic processes was proposed. SCA includes similarity matching and inference techniques in processes. The task of SCA is to synthesize the existing processes and automatically determine the workflow plan of a new process that is queried by the user and does not actually exist, in other words, the Combined/Complex Process. SCA runs a new Semantic Matching Step (SMS) during the configuration of the Workflow Plan of the Unified / Complex Process queried by the user. In addition, the inferences used in the formation of the desired Unified Process, in other words, the objective process, are the Revised Armstrong's Axioms (RAA). In this study, the contribution presented within the framework of SCA is for the first time revised Armstrong's Rules of Inference and used in Semantic Web applications, planning and inference functions.

# TOOLS AND COMPUTER LANGUAGES USED

* JAVA Programming, Java-based Servlets, JSP, Beans, Classes, GUI...
* Semantic Web Programming (OWL-S API, OWL API, JENA API, PREFUSE API, etc.)
* Android Programming
* OWL Language for Ontology Knowledge Bases (by using Protégé Editor)
* Developing Ontology Rule Knowledgebase via SWRL (Semantic Web Rule Language)
* OWL-S Language for Semantic Web Services (SWSs)
* RDF Language
* Database (MY-SQL, SQL Server, ADO.NET, MS Access)
* Hardware Programming Tools: VHDL, ALTERA MAX PLUS II, QUARTUS
* HTML, XHTML, HTML 5, Java Script, XML, CSS2, CSS3 etc.
* Visual Basic 6.0, C, C++, MATLAB
* .NET Framework (VB.NET, C#.NET, ASP.NET)

# INTERNATIONAL CONFERENCE EVENTS ORGANIZATIONS

1. Workshop Chair, IEEE ESAS 2024: The 16th IEEE International Workshop on E-Health Systems and Semantic Web Held in conjunction with COMPSAC, IEEE 48th Annual Computer Software and Applications Conference (COMPSAC), Osaka, Japan, on July 2 – 4, **2024**.
2. Workshop Chair, IEEE ESAS 2023: The 17th IEEE International Workshop on E-Health Systems and Semantic Web Held in conjunction with COMPSAC, IEEE 47th Annual Computer Software and Applications Conference (COMPSAC), June 26 **2023** to June 30 **2023**. Torino, Italy. ISSN: 0730-3157.
3. Workshop Chair, IEEE ESAS 2022: The 16th IEEE International Workshop on E-Health Systems and Semantic Web Held in conjunction with COMPSAC, IEEE 46th Annual Computer Software and Applications Conference (COMPSAC), Computers, Software & Applications in an Uncertain World, June 27-17 July 1, 2022, Italy, Torino.
4. Workshop Chair, IEEE ESAS 2021: The 15th IEEE International Workshop on E-Health Systems and Semantic Web Held in conjunction with COMPSAC, IEEE 45th Annual Computer Software and Applications Conference (COMPSAC), Intelligent and Resilient Computing for a Collaborative World, 12-16 July, 2021, Italy, Torino, <https://ieeecompsac.computer.org/2020/esas/>
5. Workshop Chair, IEEE ESAS 2020: The 15th IEEE International Workshop on E-Health Systems and Semantic Web Held in conjunction with COMPSAC, IEEE 44th Annual Computer Software and Applications Conference (COMPSAC), Driving Intelligent Transformation of the Digital World, 13-17 July, 2020, Madrid, Spain, <https://ieeecompsac.computer.org/2020/esas/>
6. Workshop Chair, IEEE ESAS 2019: The 14th IEEE International Workshop on E-Health Systems and Semantic Web Held in conjunction with COMPSAC, IEEE 43th Annual Computer Software and Applications Conference (COMPSAC), Data Driven Intelligence for a Smarter World Hosted by Marquette University, Milwaukee, Wisconsin, USA, 15-19 July, https://ieeecompsac.computer.org/2019/esas/
7. Workshop Chair, IEEE ESAS 2018: The 13th IEEE International Workshop on E-Health Systems and Semantic Web Held in conjunction with COMPSAC, IEEE 42th Annual Computer Software and Applications Conference (COMPSAC), 23-27 July, 2018, Tokyo, Japan, https://www.computer.org/web/compsac2018/esas
8. Workshop Chair, IEEE ESAS 2017: The 12th IEEE International Workshop on E-Health Systems and Semantic Web Held in conjunction with COMPSAC, IEEE 41th Annual Computer Software and Applications Conference (COMPSAC), 4–7 July 2017, Torino, Italy, https://www.computer.org/web/compsac2017/esas
9. Steering Committee, IEEE COMPSAC 2017- IEEE Computer Society International Conference on Computers, Software & Applications - Building Digital Autonomy for a Sustainable World, Torino, Italy July 4-8, https://www.computer.org/web/compsac2017/compsac-organizers
10. Workshop Chair, ESAS 2016: The 11th IEEE International Workshop on E-Health Systems and Semantic Web, in conjunction with COMPSAC 2016: The 40th IEEE Computer Society International Conference on Computers, Software & Applications Atlanta, Georgia, USA - June 10-14, 2016, https://www.computer.org/web/compsac2016/esas
11. Workshop Chair, ESAS 2015: The 10th IEEE International Workshop on E-Health Systems & Semantic Web, conjunction with COMPSAC 2015: The 39th IEEE Computer Society International Conference on Computers, Software & Applications, https://www.computer.org/web/compsac/esas
12. Workshop Chair, ESAS 2014: The 9th IEEE International Workshop on Engineering Semantic Agents — Semantics, Agents and Intelligence conjunction with IEEE COMPSAC 2014: The 38th IEEE Computer Society International Conference on Computers, Software & Applications
13. Workshop Chair, ESAS 2013: The 8th IEEE International Workshop on Engineering Semantic Agents ‐ Intelligence & Robotics Held in conjunction with the 37th IEEE COMPSAC, the IEEE Signature Conference on Computers, Software & Applications ‐ July 22‐26, 2013 ‐ Kyoto, Japan
14. Workshop Chair, ESAS 2012: The 7th IEEE International Workshop on Engineering Semantic Agents Systems, in conjunction with IEEE COMPSAC 2012- 36th Annual IEEE Computer Software and Applications Conference & Workshops
15. Workshop Chair, ESAS 2011: The 6th IEEE International Workshop on Engineering Semantic Agents Systems Held in conjunction with COMPSAC, the IEEE Signature Conference on Computers, Software, and Applications. COMPSAC 2011 will be held in Munich, Germany, July 18-22.
16. Organizing Committee Co-chairs, ICPCA-SWS 2012-Pervasive Computing and the Network World- Istanbul, Turkey, November 28-30, 2012, <http://www.icpca.bcu.ac.uk/2012/organisation.html>
17. Program Chair, Symposium on Web, Big Data & Analytics (WEDA), Web, Big Data & Analytics (WEDA), IEEE COMPSAC WEDA Symposium 2016, IEEE Transactions on Big Data Special Issue
18. Workshop Co-Chair, 2nd International Conference on Security of Information and Networks (SIN 2009) 6‐10 October 2009, Salamis Bay Conti Resort Hotel, Gazimagusa, North Cyprus, http://www.sinconf.org/sin2009/default.html.
19. Tutorials Co‐Chair, SINCONF 2011 4th International Conference on Security of Information and Networks, 14-19 November 2011, Sydney, Australia.
20. Promotion Co-Chair, The 8th International Conference on Security of Information and Networks In Technical Cooperation with ACM [SIGSAC](http://www.sigsac.org/) September 8-10, 2015 Sochi/Russia.

# BOOK & JOURNAL EDITORSHIP

* Çelik Ertuğrul, D., Elçi, A. (Eds.). (2024). IGI Global Book Project 2024: Future of Digital Technology and AI in Social Sectors, Release Date: October, 2024|Copyright: © 2025 |Pages: 604, DOI: 10.4018/979-8-3693-5533-6, ISBN13: 9798369355336|ISBN13 Softcover: 9798369355343|EISBN13: 9798369355350, <https://www.igi-global.com/book/future-digital-technology-social-sectors/340699>, Release Date: October, 2024
* Çelik Ertuğrul, D., Elçi, A. (Eds.). (2024). IGI Global Book Project 2024: Cutting-Edge Technologies for Business Sectors, Release Date: October, 2024|Copyright: © 2025 |Pages: 586, DOI: 10.4018/979-8-3693-9586-8, ISBN13: 9798369395868|ISBN13 Softcover: 9798369395875|EISBN13: 9798369395882, <https://www.igi-global.com/book/cutting-edge-technologies-business-sectors/356393>,Release Date: October, 2024
* Çelik Ertuğrul, D., Elçi, A. (Eds.). (2024). IGI Global Book Project 2024: Multifaceted Uses of Cutting-Edge Technologies and Social Concerns (Ongoing), Duygu Ertuğrul (duygu.celik@emu.edu.tr), Atilla Elci (atilla.elci@gmail.com) Release Date: November, 2024 | Copyright: © 2025 | Pages: 410 ISBN13: 9798369395912 | ISBN10: N/A | EISBN13: 9798369395936, <https://www.igi-global.com/book/multifaceted-uses-cutting-edge-technologies/356394>, Release Date: December, 2024
* Guest editors, Elçi, A., & Çelik Ertuğrul, D. (2020). Special Issue, “**Ontology-Based Smart Medical Solutions**” under the " e-Health and Staying Smarter", *37*(1), 2018, in Expert Systems: The Journal of Knowledge Engineering, Web Site: <http://onlinelibrary.wiley.com/journal/10.1111/>, ISSN: 1468-0394, Editors‐in‐Chief: Jon G. Hall, Guest Editors: Duygu Çelik Ertuğrul, Atilla Elçi, Online ISSN: 1468-0394, Published by Wiley, ISI Journal Citation Reports © Ranking: 2016: 59/104 (Computer Science Theory & Methods); 92/133 (Computer Science Artificial Intelligence), Editorial: <https://onlinelibrary.wiley.com/doi/full/10.1111/exsy.12518>,. Ontology‐Based Smart Medical Solutions. *s*
  + Also see CFP: <https://wol-prod-cdn.literatumonline.com/pb-assets/assets/14680394/Special%20Issue%20on%20e-Health%20and%20Staying%20Smarter%20EXSY%20SI%20120318.pdf>
* Guest editors: Elçi, A., & Çelik Ertuğrul, D. (2020). “**Disease Classification for Smart Health**” under the " e-Health and Staying Smarter" Special Issue, 2018, in Expert Systems: The Journal of Knowledge Engineering, Web Site: <http://onlinelibrary.wiley.com/journal/10.1111/>, ISSN: 1468-0394, *37*(1), Editors‐in‐Chief: Jon G. Hall, Guest Editors: Duygu Çelik Ertuğrul, Atilla Elçi, Online ISSN: 1468-0394, Published by Wiley, ISI Journal Citation Reports © Ranking: 2016: 59/104 (Computer Science Theory & Methods); 92/133 (Computer Science Artificial Intelligence), Editorial: <https://onlinelibrary.wiley.com/doi/full/10.1111/exsy.12517>,
  + Also see CFP: <https://wol-prod-cdn.literatumonline.com/pb-assets/assets/14680394/Special%20Issue%20on%20e-Health%20and%20Staying%20Smarter%20EXSY%20SI%20120318.pdf>
* Guest editor, "Artificial Intelligence Paradigms: Transformations, Challenges, and Future for e-Health Post COVID-19", Expert Systems: The Journal of Knowledge Engineering, Editors‐in‐Chief: Jon G. Hall, Guest Editors: Duygu Çelik Ertuğrul, Atilla Elçi, Online ISSN: 1468-0394, Published by Wiley, ISI Journal Citation Reports © Ranking: 2016: 59/104 (Computer Science Theory & Methods); 92/133 (Computer Science Artificial Intelligence), Jan 15, 2022- August 20, 2022, Web Site: <https://onlinelibrary.wiley.com/pb-assets/assets/14680394/HealthyAI_SI%20CfP-1650641261007.pdf>
* Guest editor, "Special Issue on: ""E-Health Systems and Semantic Web", 2015, International Journal of Big Data Intelligence, Editor in Chief: Prof. Ching-Hsien Hsu, Guest Editors: Duygu Çelik Ertuğrul, Atilla Elçi, Published by InderScience, ISSN online: 2053-1397, ISSN online: 2053-1397, ISSN print: 2053-1389, 15 October, 2015- 1 March, 2016, CFP: <http://www.inderscience.com/info/ingeneral/cfp.php?id=2973>.

# RESEARCH AND DEVELOPMENT PROJECT EXHIBITIONS

1. 25 May 2012 TET R&D Project Exhibition, Project Title: "Semantic Knowledge Base for Personalized Safe Food Consumption",
2. 25 May 2012 TET R&D Project Exhibition, Project Title: "Agent-based Educational Activity Discovery System for Children with Developmental Disorders".
3. 06 December 2012, Turkey Innovation Week, Project Title: "Agent-based Educational Activity Discovery System for Children with Developmental Disorders.

# R&D ENTREPRENEURSHIP COMPANY OWNER

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| --- | --- |
| Technopark Company: | Semantica Internet and Software Services Trd. Ltd. Co. |
| Owner & Manager: | Asst.Prof.Dr.Duygu Çelik Ertuğrul |
| Email: | duygucelik@semantica.com.tr |
| Address: | Yildiz Technical University, Davutpasa Campus Technology Development Zone, Incubator Office, B2 Block, No:142 K:-1 ESENLER/ISTANBUL- TURKEY |
| Telephone: | +90 (541) 210 34 38  +90 (212) 483 70 00-01 (142) |
| Fax: | +90 (212) 483 70 02 |
| Iletişim | info@semantica.com.tr |
| Web Site: | <http://semantica.com.tr/tr> |

# PATENT SUBMISSIONS

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| --- | --- | --- | --- |
| Applicant | Patent Name | Application Date | Patent No |
| Semantica İnternet ve Yazılım Hizmetleri Tic. Ltd.Şti.-Asst.Prof.Dr. Duygu Çelik | TR: Karekod/Barkod Yoluyla Mobil Ortamdan Gıda Ürünleri İçin İnformatik Bilgi Sistemi  EN: Food Information System for Food Products via Mobile Devices by reading QR Codes/Barcodes | 06-09-2013 | 2013/10512 |
| Asst.Prof.Dr. Duygu Çelik | TR: Akıllı Cihazlar İle Kişiye Özgü Güvenli Gıda Tüketimi Sistemi  EN: Personal Safety in Food Consumption via Smart Devices | 06/02/2013 | 2013/01692 |
| Semantica İnternet ve Yazılım Hizmetleri Tic. Ltd.Şti.- Asst.Prof.Dr. Duygu Çelik | TR: Mobil Yetişkin/Pediatrik Hasta Ön muayene ve İzleme Sistemi  EN: Mobile Adult / Pediatric Patient Diagnosing and Monitoring System via Mobile devices | 16-12-2014 | 2014/15237 |

# JOURNAL, CONFERENCE, WORKSHOP & SYMPOSIUM PAPER REFEREEING

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* The Journal of Tehnicki Vjesnik/Technical Gazette, http://www.tehnicki-vjesnik.com, 2015. - COMPSAC 2015, 39th COMPSAC Annual International Computer Software & Applications Conference, 01 July 2015, Taiwan.
* ESAS 2015: The 10th IEEE International Workshop on Engineering Semantic Agent Systems, Held in conjunction with COMPSAC, the IEEE Signature Conference on Computers, Software, and Applications. COMPSAC 2015, in Taiwan, July 1-5.
* COMPSAC 2014, 38th COMPSAC Annual International Computer Software & Applications Conference, July 2014, Vasteras, Sweden.
* ESAS 2014: The 9th IEEE International Workshop on Engineering Semantic Agent Systems, Held in conjunction with COMPSAC, the IEEE Signature Conference on Computers, Software, and Applications. COMPSAC 2014 will be held in Vasteras, Sweden, July 2014.
* COMPSAC 2012, 36th COMPSAC Annual International Computer Software & Applications Conference, 16 July 2012, Izmir, Turkey.
* ESAS 2012: The 7th IEEE International Workshop on Engineering Semantic Agent Systems, Held in conjunction with COMPSAC, the IEEE Signature Conference on Computers, Software, and Applications. COMPSAC 2012 will be held in İzmir, Turkey, July 16-20.
* COMPSAC 2012, 36th COMPSAC Annual International Computer Software & Applications Conference, 16 July 2012, Izmir, Turkey.
* ESAS 2011: The 6th IEEE International Workshop on Engineering Semantic Agent Systems, Held in conjunction with COMPSAC, the IEEE Signature Conference on Computers, Software, and Applications. COMPSAC 2011 will be held in Munich, Germany, July 18-22.
* [WEBIST 2010,](http://www.webist.org/) 6th Intl. Con. on Web Info. Systems & Technologies, 7-10 April 2010, Valencia, Spain.
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* COMPSAC 2009, 33rd COMPSAC Annual International Computer Software & Applications Conference, 20 July 2009, Seattle, Washington, USA.
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* SIN 2010, 7-11 September 2009, Taganrog, Rostov-on-Don, Russia.
* SIN 2009, 6-10 October 2009, Gazimagusa, North Cyprus.
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* SIN 2014, Elsevier, Journal of Information Security and Applications, <http://ees.elsevier.com/jisa/>SIN 2013, Elsevier, Journal of Information Security and Applications, <http://ees.elsevier.com/jisa/>