

## Prof. MEHMET HALİT S. OĞUZTÜZÜN

### Personal Information

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### International Researcher IDs

ScholarID: fsTmDVkAAAAJ

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Publons / Web Of Science ResearcherID: ABA-3509-2020

ScopusID: 24335821400

Yoksis Researcher ID: 183182

### Education Information

Doctorate, The University of Iowa, Department Of Computer Science, United States Of America 1985 - 1991

Postgraduate, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, Turkey  
1982 - 1984

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, Turkey  
1977 - 1982

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, A logical characterization of the observational equivalence of processes, The University Of Iowa, Department Of Computer Science, 1991

Postgraduate, Shrinkers: A Class of Recognizers for a Subclass of Context-Free Languages, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 1984

### Research Areas

Computer Sciences, Theoretical Computer Science, Formal Languages, Software, Software Engineering, Engineering and Technology

### Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 2015 -  
Continues

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering,

2011 - 2015

Lecturer, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 2006 - 2011  
Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering,  
1992 - 2006

## Academic and Administrative Experience

Head of Department, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering,  
2018 - Continues

## Advising Theses

- OĞUZTÜZÜN M. H. S., Model management for hypothesis-driven simulation experiment workflows, Doctorate, S.ÇAM(Student), 2022
- OĞUZTÜZÜN M. H. S., Real-time object-oriented framework for fmi co-simulation, Postgraduate, M.Çam(Student), 2020
- OĞUZTÜZÜN M. H. S., Schedulability analysis of real-time multi-frame co-simulations on multi-core platforms, Doctorate, M.Uzair(Student), 2020
- OĞUZTÜZÜN M. H. S., Data sharing using mqtt and zigbee-based dds on resource-constrained contiki-based devices, Postgraduate, T.Yıldırım(Student), 2020
- OĞUZTÜZÜN M. H. S., A Dynamic Software Product Line for Remote Monitoring of Computer Systems, Postgraduate, G.ERDİL(Student), 2019
- OĞUZTÜZÜN M. H. S., CM2-based physical item hierarchy implementation for a product lifecycle management system, Postgraduate, D.Abadan(Student), 2019
- OĞUZTÜZÜN M. H. S., Multi-target implementation of a domain specific language for extended feature models, Postgraduate, G.Demirtaş(Student), 2018
- OĞUZTÜZÜN M. H. S., Multi-Target Implementation of a Domain Specific Language For Extended Feature Models, Postgraduate, G.DEMİRTAŞ(Student), 2018
- OĞUZTÜZÜN M. H. S., Dynamic constraint satisfaction algorithm for reconfiguration of feature models, Postgraduate, S.ENTEKHABI(Student), 2018
- OĞUZTÜZÜN M. H. S., Parallel resampling methods for particle filters on graphics processing unit, Doctorate, Ö.DÜLGER(Student), 2017
- OĞUZTÜZÜN M. H. S., Modeling and code generation for a reference software architecture for naval platform command and control systems, Postgraduate, N.KÜBRA(Student), 2017
- OĞUZTÜZÜN M. H. S., An object-oriented framework for functional mock-up interface co-simulation, Postgraduate, M.ASLAN(Student), 2016
- KARAGÖZ P., OĞUZTÜZÜN M. H. S., Spatiotemporal data mining for situation awareness in microblogs, Doctorate, Ö.ÖZDİKİŞ(Student), 2016
- OĞUZTÜZÜN M. H. S., SPARKS: A LANGUAGE FOR TEST SCRIPTING FOR INSTRUMENTATION SYSTEMS, Postgraduate, M.SAEEDİ(Student), 2015
- OĞUZTÜZÜN M. H. S., SCHMİDT Ş. E., RSAR: A layered software architecture for cyber-physical systems, Postgraduate, E.AKAGÜNDÜZ(Student), 2015
- SCHMİDT Ş. E., OĞUZTÜZÜN M. H. S., RSAR: a layered software architecture for cyber-physical systems / , Postgraduate, E.Akagündüz(Student), 2015
- ONUR E., OĞUZTÜZÜN M. H. S., Density estimation in large-scale wireless sensor networks, Postgraduate, A.EROĞLU(Student), 2015
- OĞUZTÜZÜN M. H. S., Sparks: a language for test process scripting for instrumentation systems, Postgraduate, M.Saedi(Student), 2015
- OĞUZTÜZÜN M. H. S., Functional mockup unit adaptation for HLA-compliant distributed simulation, Postgraduate, F.YILMAZ(Student), 2014

OĞUZTÜZÜN M. H. S., A methodology for cross-resolution modeling in DEVS using EVENT-B refinement, Doctorate, A.KARA(Student), 2014

OĞUZTÜZÜN M. H. S., BATMAZ İ., Metamodeling atomic models in discrete event system specification (DEVS) formalism using multivariate adaptive regression splines (MARS), Doctorate, C.DORUK(Student), 2014

OĞUZTÜZÜN M. H. S., A goal question metric based tool for goal oriented business process modeling, Postgraduate, B.MERAL(Student), 2014

OĞUZTÜZÜN M. H. S., Distributed discrete event simulation architecture with connectors, Postgraduate, İ.ÖZGÜR(Student), 2014

OĞUZTÜZÜN M. H. S., YAZICI A., Describing the software architecture of a multimedia data management system, Postgraduate, Ç.AVCI(Student), 2013

OĞUZTÜZÜN M. H. S., Feature modeling and automated analysis for an embedded software product family, Postgraduate, G.FEDAKAR(Student), 2013

DOĞRU A. H., OĞUZTÜZÜN M. H. S., Condition oriented enrichment approach in business rule management systems, Postgraduate, M.HALİL(Student), 2013

OĞUZTÜZÜN M. H. S., Oğuztüzün M., DDS based MIL-STD-1553B data bus interface simulation, Postgraduate, E.Deniz(Student), 2012

OĞUZTÜZÜN M. H. S., KARATAŞ A. S., An xml-based feature modeling language, Postgraduate, L.Nabdel(Student), 2011

OĞUZTÜZÜN M. H. S., Transforming mission space models to executable simulation models, Doctorate, G.Özhan(Student), 2011

OĞUZTÜZÜN M. H. S., Variable structure and dynamism extensions to a devts based modeling and simulation framework, Postgraduate, F.Deniz(Student), 2010

OĞUZTÜZÜN M. H. S., Ontology driven development for hla federates, Postgraduate, C.Fatma(Student), 2010

OĞUZTÜZÜN M. H. S., Goal oriented modeling of situation awareness in a command and control system, Postgraduate, H.Ali(Student), 2010

OĞUZTÜZÜN M. H. S., HLA fom development with model transformations, Postgraduate, A.Cem(Student), 2010

OĞUZTÜZÜN M. H. S., Analysis of extended feature models with constraint programming, Doctorate, A.Serkan(Student), 2010

OĞUZTÜZÜN M. H. S., Feature oriented domain specific language for dependency injection in dynamic software product lines, Postgraduate, O.Dayıbaş(Student), 2009

OĞUZTÜZÜN M. H. S., Dynamic model integration and 3d graphical interface for a virtual ship, Postgraduate, C.Alp(Student), 2008

OĞUZTÜZÜN M. H. S., Model-based approach to the federation object model independence problem, Postgraduate, M.Fatih(Student), 2007

OĞUZTÜZÜN M. H. S., Metamodeling for the HLA federation architectures, Doctorate, O.Topçu(Student), 2007

OĞUZTÜZÜN M. H. S., Model-based code generation for the high level architecture federates, Doctorate, B.Mehmet(Student), 2007

OĞUZTÜZÜN M. H. S., A metamodel for the high level architecture object model, Postgraduate, D.Çetinkaya(Student), 2005

OĞUZTÜZÜN M. H. S., Coordinate systems for a naval virtual environment, Postgraduate, A.Kılıç(Student), 2005

OĞUZTÜZÜN M. H. S., Specification and verification of confidentiality in software architectures, Doctorate, C.Ulu(Student), 2004

OĞUZTÜZÜN M. H. S., Deriving a dynamic programming algorithm for batch scheduling in the refinement calculus, Postgraduate, İ.Aktuğ(Student), 2003

OĞUZTÜZÜN M. H. S., Oğuztüzün M., Monitoring and checking of discrete event simulations, Postgraduate, B.Ulu(Student), 2003

OĞUZTÜZÜN M. H. S., Oğuztüzün M., Proof of the basic theorem on concept lattices in Isabelle/HOL, Postgraduate, B.Sertkaya(Student), 2003

**Published journal articles indexed by SCI, SSCI, and AHCI**

- I. **Data interoperability between DDS and HLA through a dynamically reconfigurable gateway**  
Kaya M. C., Cilden E., KARAMANLIOĞLU A., MURAT F., DOĞRU A. H., OĞUZTÜZÜN M. H. S.  
Software - Practice and Experience, vol.53, no.11, pp.2200-2221, 2023 (SCI-Expanded)
- II. **Uphill resampling for particle filter and its implementation on graphics processing unit**  
Dülger Ö., OĞUZTÜZÜN M. H. S., DEMİREKLER M.  
Parallel Computing, vol.115, 2023 (SCI-Expanded)
- III. **HYPOTHESIS-DRIVEN SIMULATION EXPERIMENTS WITH AN EXTENSION TO SED-ML**  
Cam S., Oguztuzun H., Yilmaz L.  
INTERNATIONAL JOURNAL OF SIMULATION MODELLING, vol.21, no.1, pp.17-28, 2022 (SCI-Expanded)
- IV. **Internet of Measurement Things Architecture: Proof of Concept with Scope of Accreditation**  
KAYA M. Ç., Nikoo M. S., Schwartz M. L., Oguztuzun H.  
SENSORS, vol.20, no.2, 2020 (SCI-Expanded)
- V. **Predetermined Rollbacks: An extension to Time Warp for spatially parallel agent-based simulation**  
Gorur B. K., İMRE K. M., Oguztuzun H., Yilmaz L.  
SIMULATION MODELLING PRACTICE AND THEORY, vol.95, pp.60-77, 2019 (SCI-Expanded)
- VI. **On the use of model-driven engineering principles for the management of simulation experiments**  
Dayibas O., Oguztuzun H., Yilmaz L.  
JOURNAL OF SIMULATION, vol.13, no.2, pp.83-95, 2019 (SCI-Expanded)
- VII. **Schedulability analysis of real-time multiframe cosimulations on multicore platforms**  
Ahsan M. U., Ozuztuzun H.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.27, no.5, pp.3599-3614, 2019 (SCI-Expanded)
- VIII. **Internet of Measurement Things: Toward an Architectural Framework for the Calibration Industry**  
Nikoo M. S., KAYA M. Ç., Schwartz M. L., Oguztuzun H.  
INTERNET OF THINGS IN THE INDUSTRIAL SECTOR: SECURITY AND DEVICE CONNECTIVITY, SMART ENVIRONMENTS, AND INDUSTRY 4.0, pp.81-102, 2019 (SCI-Expanded)
- IX. **Memory Coalescing Implementation of Metropolis Resampling on Graphics Processing Unit**  
Dulger O., Oguztuzun H., DEMİREKLER M.  
JOURNAL OF SIGNAL PROCESSING SYSTEMS FOR SIGNAL IMAGE AND VIDEO TECHNOLOGY, vol.90, no.3, pp.433-447, 2018 (SCI-Expanded)
- X. **Usability evaluation of a web-based ontology browser: the case of TSONT**  
Karakus Yilmaz T., DURAK U., Oguztuzun H., ÇAĞILTAY K.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.26, no.2, pp.1115-1128, 2018 (SCI-Expanded)
- XI. **A survey on location estimation techniques for events detected in Twitter**  
Ozdikis O., Oguztuzun H., Karagöz P.  
KNOWLEDGE AND INFORMATION SYSTEMS, vol.52, pp.291-339, 2017 (SCI-Expanded)
- XII. **Evidential estimation of event locations in microblogs using the Dempster-Shafer theory**  
Ozdikis O., Ogurtuzun H., Karagöz P.  
Information Processing and Management, vol.52, no.6, pp.1227-1246, 2016 (SCI-Expanded)
- XIII. **Dynamic simulation metamodeling using MARS: A case of radar simulation**  
Bozagac D., BATMAZ İ., Oguztuzun H.  
MATHEMATICS AND COMPUTERS IN SIMULATION, vol.124, pp.69-86, 2016 (SCI-Expanded)
- XIV. **Attribute-based variability in feature models**  
Karatas A. S., Oguztuzun H.  
REQUIREMENTS ENGINEERING, vol.21, no.2, pp.185-208, 2016 (SCI-Expanded)
- XV. **A Methodology for Resolution Mapping for Cross-Resolution Simulation using Event-B**  
Kara A., Oguztuzun H., Alpdemir M. N.  
COMPUTER JOURNAL, vol.58, no.11, pp.2804-2823, 2015 (SCI-Expanded)
- XVI. **Indexing Fuzzy Spatiotemporal Data for Efficient Querying: A Meteorological Application**  
Sozer A., YAZICI A., Oguztuzun H.

- IEEE TRANSACTIONS ON FUZZY SYSTEMS, vol.23, no.5, pp.1399-1413, 2015 (SCI-Expanded)
- XVII. Transformation of Conceptual Models to Executable High-Level Architecture Federation Models**  
Ozhan G., Oguztuzun H.  
CONCEPTS AND METHODOLOGIES FOR MODELING AND SIMULATION: A TRIBUTE TO TUNCER OREN, pp.135-173,  
2015 (SCI-Expanded)
- XVIII. From extended feature models to constraint logic programming**  
KARATAS A. S., Oguztuzun H., Dogru A. H.  
SCIENCE OF COMPUTER PROGRAMMING, vol.78, no.12, pp.2295-2312, 2013 (SCI-Expanded)
- XIX. Layered simulation architecture: A practical approach**  
Topcu O., Oguztuzun H.  
SIMULATION MODELLING PRACTICE AND THEORY, vol.32, pp.1-14, 2013 (SCI-Expanded)
- XX. Modeling Product Line Software Assets Using Domain-Specific Kits**  
ALTINTAS N. I., CETIN S., Dogru A. H., Oguztuzun H.  
IEEE TRANSACTIONS ON SOFTWARE ENGINEERING, vol.38, no.6, pp.1376-1402, 2012 (SCI-Expanded)
- XXI. Supporting dynamic simulations with Simulation Modeling Architecture (SiMA): a Discrete Event System Specification-based modeling and simulation framework**  
Deniz F., Alpdemir M. N., Kara A., Oguztuzun H.  
SIMULATION-TRANSACTIONS OF THE SOCIETY FOR MODELING AND SIMULATION INTERNATIONAL, vol.88, no.6,  
pp.707-730, 2012 (SCI-Expanded)
- XXII. Towards interoperable and composable trajectory simulations: an ontology-based approach**  
Durak U., Oguztuzun H., Algin C. K., Ozdikis O.  
JOURNAL OF SIMULATION, vol.5, no.3, pp.217-229, 2011 (SCI-Expanded)
- XXIII. Model-based code generation for HLA federates**  
Adak M., Topcu O., Oguztuzun H.  
SOFTWARE-PRACTICE & EXPERIENCE, vol.40, no.2, pp.149-175, 2010 (SCI-Expanded)
- XXIV. Querying Fuzzy Spatiotemporal Databases: Implementation Issues**  
Soezer A., YAZICI A., Oguztuzun H., Petry F. E.  
UNCERTAINTY APPROACHES FOR SPATIAL DATA MODELING AND PROCESSING: A DECISION SUPPORT  
PERSPECTIVE, vol.271, pp.97-116, 2010 (SCI-Expanded)
- XXV. ONTOLOGY-BASED DOMAIN ENGINEERING FOR TRAJECTORY SIMULATION REUSE**  
Durak U., Oguztuzun H., Ider S. K.  
INTERNATIONAL JOURNAL OF SOFTWARE ENGINEERING AND KNOWLEDGE ENGINEERING, vol.19, no.8, pp.1109-  
1129, 2009 (SCI-Expanded)
- XXVI. Metamodeling live sequence charts for code generation**  
Topcu O., Adak M., Oguztuzun H.  
SOFTWARE AND SYSTEMS MODELING, vol.8, no.4, pp.567-583, 2009 (SCI-Expanded)
- XXVII. Modeling and querying fuzzy spatiotemporal databases**  
Soezer A., YAZICI A., Oguztuzun H., Tas O.  
INFORMATION SCIENCES, vol.178, no.19, pp.3665-3682, 2008 (SCI-Expanded)
- XXVIII. A metamodel for federation architectures**  
Topcu O., Adak M., Oguztuzun H.  
ACM TRANSACTIONS ON MODELING AND COMPUTER SIMULATION, vol.18, no.3, 2008 (SCI-Expanded)
- XXIX. Ontology-based trajectory simulation framework**  
Durak U., Oguztuzun H., Ider S. K.  
JOURNAL OF COMPUTING AND INFORMATION SCIENCE IN ENGINEERING, vol.8, no.1, 2008 (SCI-Expanded)
- XXX. Developing an HLA-based naval maneuvering simulation**  
Topcu O., Oguztuzun H.  
NAVAL ENGINEERS JOURNAL, vol.117, no.1, pp.23-40, 2005 (SCI-Expanded)
- XXXI. Multilevel graph partitioning: an evolutionary approach**  
Kucupetek S., Polat F., Oguztuzun H.  
JOURNAL OF THE OPERATIONAL RESEARCH SOCIETY, vol.56, no.5, pp.549-562, 2005 (SCI-Expanded)

- XXXII. **Proof of the basic theorem on concept lattices in Isabelle/HOL**  
Sertkaya B., Oguztuzun H.  
COMPUTER AND INFORMATION SCIENCES - ISCIS 2004, PROCEEDINGS, vol.3280, pp.976-985, 2004 (SCI-Expanded)
- XXXIII. **A FRAGMENT OF 1ST-ORDER LOGIC ADEQUATE FOR OBSERVATION EQUIVALENCE**  
OGUZTUZUN H.  
LECTURE NOTES IN COMPUTER SCIENCE, vol.626, pp.278-292, 1992 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Incremental clustering with vector expansion for online event detection in microblogs**  
Ozdikis O., KARAGÖZ P., Oguztuzun H.  
SOCIAL NETWORK ANALYSIS AND MINING, vol.7, no.1, 2017 (ESCI)
- II. **Dynamic and context based interoperability to support infrastructure management in municipalities**  
TUFAN E., OĞUZTÜZÜN M. H. S., AKYÜREK S. Z.  
Journal of the Urban and Regional Information Systems Association, vol.26, no.2, pp.33-49, 2015 (Scopus)
- III. **DDS based MIL-STD-1553B Data Bus interface simulation**  
Deniz E., Durak U., Guclu K., Oguztuzun H.  
JOURNAL OF DEFENSE MODELING AND SIMULATION-APPLICATIONS METHODOLOGY TECHNOLOGY-JDMS, vol.12, no.2, pp.179-188, 2015 (ESCI)
- IV. **Dynamic and context-based GIS interoperability to support infrastructure management in municipalities**  
Emrah T., AKYÜREK S. Z., OĞUZTÜZÜN M. H. S.  
URISA Journal, vol.26, no.2, pp.33-50, 2015 (Scopus)
- V. **Feature Modeling and Automated Analysis for a Digital Television Product Family**  
Fedakar Gönül G., OĞUZTÜZÜN M. H. S., KARATAŞ A. S.  
International Journal of Computer and Electrical Engineering, vol.6, no.4, pp.358-364, 2014 (Scopus)
- VI. **GoalDAG – Archimate integration**  
Gungor C., Gungor C., Oguztuzun H.  
Communications in Computer and Information Science, vol.465, pp.194-210, 2014 (Scopus)
- VII. **USING CONTEXT INFORMATION FOR STAGED CONFIGURATION OF FEATURE MODELS**  
KARATAŞ A. S., DOĞRU A. H., Oguztuzun H., Tolun M.  
JOURNAL OF INTEGRATED DESIGN & PROCESS SCIENCE, vol.15, no.2, pp.37-51, 2011 (ESCI)
- VIII. **Scenario management practices in HLA based distributed simulation**  
TOPÇU O., OĞUZTÜZÜN M. H. S.  
Journal of Naval Science and Engineering, vol.6, no.2, pp.1-33, 2010 (Peer-Reviewed Journal)
- IX. **Modeling of Field Artillery Tasks with Live Sequence Charts**  
Ozhan G., Oguztuzun H., Evrensel P.  
JOURNAL OF DEFENSE MODELING AND SIMULATION-APPLICATIONS METHODOLOGY TECHNOLOGY-JDMS, vol.5, no.4, pp.219-252, 2008 (ESCI)
- X. **Coupled transport/chemistry calculations on the massively parallel processor computer**  
Carmichael G., Cohen D., Cho S., OĞUZTÜZÜN M. H. S.  
Computers and Chemical Engineering, vol.13, no.9, pp.1065-1073, 1989 (Scopus)

## Books & Book Chapters

- I. **Internet of Measurement Things: Toward an Architectural Framework for the Calibration Industry**  
Saeedi Nikoo M., Kaya M. Ç., Schwartz M. L., Oğuztüzün M. H. S.  
in: The Internet of Things in the Industrial Sector, Mahmood Z., Editor, Springer, Cham, pp.81-102, 2019

- II. **Guide to Distributed Simulation with HLA**  
TOPÇU O., OĞUZTÜZÜN M. H. S.  
Springer International Publishing, Cham, 2017
- III. **Distributed Simulation A Model Driven Engineering Approach**  
TOPÇU O., DURAK U., OĞUZTÜZÜN M. H. S., YILMAZ L.  
Springer, Zürich, 2016
- IV. **Extracting location information from crowd-sourced social network data**  
KARAGÖZ P., OĞUZTÜZÜN M. H. S., ÇAKICI R., ÖZDİKİŞ Ö., ÖNAL K. D., SAĞCAN M.  
in: European Handbook of Crowdsourced Geographic Information, Capineri, C, Haklay, M, Huang, H, Antoniou, V, Kettunen, J, Ostermann, F and Purves, R, Editor, Ubiquity Press, Londrina, pp.195-204, 2016
- V. **Transformation of conceptual models to executable High Level Architecture federation models**  
ÖZHAN G., OĞUZTÜZÜN M. H. S.  
in: Concepts and Methodologies for Modeling and Simulation, Yılmaz, Levent, Editor, Springer, pp.135-173, 2015
- VI. **Context based semantic relations in tweets**  
Özdikiş Ö., Karagöz P., Oğuztüzün M. H. S.  
in: State of the Art Applications of Social Network Analysis, Can F, Özyer T, Polat F, Editor, Springer, Zürich, pp.35-52, 2014
- VII. **Querying fuzzy spatio-temporal databases: Implementation issues**  
SÖZER A., YAZICI A., OĞUZTÜZÜN M. H. S., PETRY F.  
in: Uncertainty Approaches for Spatial Data Modeling and Processing: A Decision Support Perspective (Studies in Computational Intelligence, vol. 271), J. Kacprzyk, F.E. Petry, A. Yazıcı, Editor, Springer, Heidelberg, pp.97-116, 2010

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **Software Architecture Evolution of a Physical Security Information Management System**  
Özçelik O., Oğuztüzün M. H. S.  
The Eighth International Conference on Advances and Trends in Software Engineering (SOFTENG 2022), Barcelona, Spain, 24 - 28 April 2022, pp.15-20
- II. **UNCERTAINTY CALCULATION-AS-A-SERVICE: AN IIOT APPLICATION FOR AUTOMATED RF POWER SENSOR CALIBRATION**  
ÇETİNKAYA A., KAYA M. Ç., Danaci E., OĞUZTÜZÜN M. H. S.  
IMEKO TC6 1st International Conference on Metrology and Digital Transformation, M4Dconf 2022, Berlin, Germany, 19 - 21 September 2022
- III. **AUTORFPOWER: Automatic RF Power Measurement Software for Metrological Applications**  
ÇETİNKAYA A., Dogan A. K., Danaci E., OĞUZTÜZÜN M. H. S.  
2nd International Informatics and Software Engineering Conference, IISEC 2021, Ankara, Turkey, 16 - 17 December 2021
- IV. **A framework for constructing agent-based aerospace simulations using model to text transformation**  
DERE B. E., GÖRÜR B. K., OĞUZTÜZÜN M. H. S.  
2020 Summer Simulation Conference, Madrid, Spain, 20 July 2022
- V. **Implementation of the auxiliary sampling importance resampling particle filter on graphics processing unit Yardimli ornekleme onem yeniden ornekleme paracik siizgecinin grafi isleme biriminde gercekle stirilmesi**  
DÜLGER Ö., OĞUZTÜZÜN M. H. S.  
5th International Conference on Computer Science and Engineering, UBMK 2020, Diyarbakır, Turkey, 9 - 10 September 2020, pp.156-159
- VI. **Factors on the execution times of metropolis resampling and its variations**  
DÜLGER Ö., OĞUZTÜZÜN M. H. S.  
5th International Conference on Computer Science and Engineering, UBMK 2020, Diyarbakır, Turkey, 9 - 10 September 2020, pp.152-155

- VII. **Transformation from SysML to RePast and Back**  
Çam S., Görür B. K., Ledet J., Oğuztüzün H., Yılmaz L.  
11th International Conference on Ambient Systems, Networks and Technologies, ANT 2020 / 3rd International Conference on Emerging Data and Industry 4.0, EDI40 2020 / Affiliated Workshops, Warszawa, Poland, 6 - 09 April 2020, vol.170, pp.845-850
- VIII. **Variability Extension to SparkS, a Domain Specific Scripting Language for Electronic Test Equipment**  
Nikoo M. S., Oguztuzun H.  
4th International Conference on Computer Science and Engineering, UBMK 2019, Samsun, Turkey, 11 - 15 September 2019, pp.767-772
- IX. **Contribution of the resampling stage to the execution time of particle filter Yeniden örnekleme adiminin parçacik süzgecinin çalışma zamanina katkisi**  
Dulger O., Oguztuzun H.  
27th Signal Processing and Communications Applications Conference, SIU 2019, Sivas, Turkey, 24 - 26 April 2019
- X. **Contribution of the Resampling Stage to the Execution Time of Particle Filter**  
Dulger O., Oguztuzun H.  
27th Signal Processing and Communications Applications Conference (SIU), Sivas, Turkey, 24 - 26 April 2019
- XI. **A CONFIGURABLE GATEWAY FOR DDS-HLA INTEROPERABILITY**  
KAYA M. Ç., KARAMANLIOĞLU A., Cetintas I. C., Cilden E., Canberi H., Oguztuzun H.  
Summer Simulation Conference (SummerSim), Berlin, Germany, 22 - 24 July 2019
- XII. **An MII-Aware SoA Editor for the Industrial Internet of Things**  
Nikoo M. S., KAYA M. Ç., Schwartz M. L., Oguztuzun H.  
2nd IEEE International Workshop on Metrology for Industry 4.0 and Internet of Things (IoT) (MetroInd4.0 and IoT), Naples, Italy, 4 - 06 June 2019, pp.213-218
- XIII. **Dynamic constraint satisfaction algorithm for online feature model reconfiguration**  
Entekhabi S., KARATAŞ A. S., Oguztuzun H.  
6th International Conference on Control Engineering and Information Technology, CEIT 2018, İstanbul, Turkey, 25 - 27 October 2018
- XIV. **Non-coalesced Access Patterns of Global Memory Load Transactions in Metropolis Resampling Implemented on Graphics Processing Unit**  
Dulger O., Oguztuzun H.  
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- XV. **Supporting Simulation Experiments with Megamodeling**  
Cam S., Dayibas O., Gorur B. K., OĞUZTÜZÜN M. H. S., Yılmaz L., Chakladar S., Doud K., Smith A. E., Teran-Somohano A.  
6th International Conference on Model-Driven Engineering and Software Development (MODELSWARD), Funchal, Portugal, 22 - 24 January 2018, pp.372-378
- XVI. **Migration of Data from Relational Database to Graph Database**  
Unal Y., Oguztuzun H.  
8th ACM International Conference on Information Systems and Technologies (ACM ICIST), İstanbul, Turkey, 16 - 18 March 2018
- XVII. **MODELS AS SELF-AWARE COGNITIVE AGENTS AND ADAPTIVE MEDIATORS FOR MODEL-DRIVEN SCIENCE**  
Yılmaz L., Chakladar S., Doud K., Smith A. E., Teran-Somohano A., Oguztuzun H., Cam S., Dayibas O., Gorur B. K.  
Winter Simulation Conference (WSC), Nevada, United States Of America, 3 - 06 December 2017, pp.1300-1311
- XVIII. **DDS-HLA birlikte çalışabilirlik yaklaşımları üzerine bir literatür araştırması**  
KAYA M. Ç., ÇILDEN E., CANBERİ H., OĞUZTÜZÜN M. H. S.  
Ulusal Savunma Uygulamaları Modelleme ve Simülasyon Konferansı, Ankara, Turkey, 21 - 23 November 2017
- XIX. **Blocks and Text Integration in a Language-Based Editor for a Domain-Specific Language**  
Altuncu E., Bilgehan B. K., Kartal Y. S., Kizilgunes S., Nikoo M. S., Oguztuzun H.  
2017 International Conference on Computer Science and Engineering (UBMK), Antalya, Turkey, 5 - 08 October 2017, pp.1084-1089



- XX. **An incremental constraint satisfaction algorithm for dynamic reconfiguration**  
ENTEKHABİ S., KARATAŞ A. S., OĞUZTÜZÜN M. H. S.  
Workshop on Dependability, İzmir, Turkey, 08 May 2017
- XXI. **Adaptive framework for remote monitoring and management of computer systems**  
YALÇIN G., OĞUZTÜZÜN M. H. S.  
World Electro Mobility Conference (WELMO), İzmir, Turkey, 4 - 05 May 2017, pp.25-30
- XXII. **A Reflexion Model based Architecture Conformance Analysis Toolkit for OSGi-compliant Applications**  
Cilden E., Oguztuzun H.  
IEEE International Conference on Software Architecture (ICSA), Gothenburg, Sweden, 3 - 07 April 2017, pp.265-268
- XXIII. **Improving the performance of optimistic time management mechanism with sub-state saving**  
Görür B. K., Imre K., Oğuztüzün H., Yılmaz L.  
25th High Performance Computing Symposium, HPC 2017, Part of the 2017 Spring Simulation Multi-Conference, SpringSim 2017, Virginia, United States Of America, 23 - 26 April 2017, vol.49, pp.117-128
- XXIV. **System entity structure and model base framework in model based engineering of simulations for technical systems**  
Durak U., Pawletta T., Oguztuzun H., Zeigler B. P.  
2017 International Symposium on Model-Driven Approaches for Simulation Engineering, Mod4Sim 2017, Part of the 2017 Spring Simulation Multi-Conference, SpringSim 2017, Virginia, United States Of America, 23 - 26 April 2017, vol.49, pp.1-10
- XXV. **Metamodeling of Reference Software Architecture and Automatic Code Generation**  
Turhan N. K., Oguztuzun H.  
10th European Conference on Software Architecture Workshops (ECSA), Copenhagen, Denmark, 28 November - 02 December 2016
- XXVI. **Özellik modelleri ve temsil ettikleri ürün tipleri arasındaki ilişkilerin çözümlenmesi**  
KARATAŞ A. S., OĞUZTÜZÜN M. H. S.  
10. Ulusal Yazılım Mühendisliği Sempozyumu, Çanakkale, Turkey, 24 - 26 October 2016
- XXVII. **Repast HPC with optimistic time management**  
Gorur B. K., Imre K., Oguztuzun H., Yılmaz L.  
24th High Performance Computing Symposium, HPC 2016, Part of the 2016 Spring Simulation Multi-Conference, SpringSim 2016, California, United States Of America, 3 - 06 April 2016, vol.48, pp.23-31
- XXVIII. **Özellik Modelleri ve Temsil Ettikleri Ürün Tipleri Arasındaki İlişkilerin Çözülmesi**  
KARATAŞ A. S., Oğuztüzün H.  
10th Turkish National Software Engineering Symposium, UYMS 2016, Çanakkale, Turkey, 24 - 26 October 2016, vol.1721, pp.185-196
- XXIX. **A MODEL-DRIVEN ENGINEERING APPROACH TO SIMULATION EXPERIMENT DESIGN AND EXECUTION**  
Teran-Somohano A., Smith A. E., Ledet J., Yılmaz L., Oguztuzun H.  
Winter Simulation Conference (WSC), California, United States Of America, 6 - 09 December 2015, pp.2632-2643
- XXX. **Parçacık süzgeci için Metropolis yeniden örnekleme yönteminin grafik işleme biriminde gerçekleştirimi**  
DÜLGER Ö., DEMİREKLER M., OĞUZTÜZÜN M. H. S.  
4. Ulusal Yüksek Başarılı Hesaplama Konferansı, Ankara, Turkey, 1 - 02 October 2015
- XXXI. **Estimating Density of Wireless Networks in Practice**  
Eroglu A., Onur E., Oguztuzun H.  
26th IEEE Annual International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC), Hong Kong, PEOPLES R CHINA, 30 August - 02 September 2015, pp.1476-1480
- XXXII. **MOKA An object oriented framework for FMI co simulation**  
ASLAN M., OĞUZTÜZÜN M. H. S., DURAK U., TAYLAN K.  
Summer Computer Simulation Conference, Chicago, IL, United States Of America, 21 - 23 July 2015, pp.1-8
- XXXIII. **Distributed Discrete Event Simulation Architecture with Connectors**  
ÇOLPANKAN İ. Ö., KARA A., OĞUZTÜZÜN M. H. S.

Proceedings of the 5th International Conference on Simulation and Modeling Methodologies, Technologies and Applications, Colmar, Alsace, France, 21 - 23 July 2015, pp.130-137

- XXXIV. **Implementation of the Sampling Importance Resampling Particle Filter Algorithm in Graphics Processing Unit**  
Dulger O., Oguztuzun H., DEMİREKLER M.  
23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.2195-2198
- XXXV. **Örnekleme önem yeniden örnekleme parçacık süzgeci algoritmasının grafik işleme biriminde gerçekleştirilmesi**  
DÜLGER Ö., OĞUZTÜZÜN M. H. S., DEMİREKLER M.  
IEEE 23. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Malatya, Turkey, 16 - 18 May 2015, pp.2195-2198
- XXXVI. **A hybrid transformation process for simulation modernization and reuse via model replicability and scenario reproducibility**  
LEDET J. W., ÇAM S., GÖRÜR B. K., DAYIBAŞ O., OĞUZTÜZÜN M. H. S., YILMAZ L., SMITH A.  
AlaSim International Conference, Hunstville, AL, United States Of America, 6 - 07 May 2015, pp.1-10
- XXXVII. **GoalDAG - ArchiMate Integration**  
Gungor C., Oguztuzun H.  
20th International Conference on Information and Software Technologies (ICIST), Druskininkai, Lithuania, 9 - 10 October 2014, vol.465, pp.194-210
- XXXVIII. **Scenario Development: A Model-Driven Engineering Perspective**  
DURAK U., TOPÇU O., SIEGFRIED R., OĞUZTÜZÜN M. H. S.  
Proceedings of the 4th International Conference on Simulation and Modeling Methodologies, Technologies and Applications, Vienna, Austria, Austria, 28 - 30 August 2014, pp.117-124
- XXXIX. **Adapting Functional Mockup Units for HLA-compliant Distributed Simulation**  
YILMAZ F., DURAK U., TAYLAN K., OĞUZTÜZÜN M. H. S.  
10th International Modelica Conference, Lund, Sweden, 10 - 12 March 2014, pp.247-257
- XL. **Heterogeneous DEVS simulations with connectors and reo based compositions [Work in Progress]**  
Kara A., Öguztüzün H., Nedim Alpdemir M.  
2014 Symposium on Theory of Modeling and Simulation - DEVS Integrative M and S Symposium, DEVS 2014; 2014 Spring Simulation Multi-Conference, SpringSim 2014, Tampa, FL, United States Of America, 13 - 16 April 2014, vol.46, pp.1-6
- XLI. **Toward model-driven engineering principles and practices for model replicability and experiment reproducibility (Work in progress)**  
Ledet J., Teran-Somohano A., Butcher Z., Yilmaz L., Smith A. E., Öguztüzün H., Dayibaş O., Görür B. K.  
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- XLII. **Software Architecture of a Multimedia Data Management System**  
Salma Ç., Oguztuzun H., YAZICI A.  
International Conference on Multimedia Computing and Systems (ICMCS), Marrakech, Morocco, 14 - 16 April 2014, pp.530-535
- XLIII. **Specification and documentation of conceptual scenarios using Base Object Models (BOMs)**  
Siegfried R., Oguztüzün H., Durak U., Hatip A., Herrmann G., Gustavson P., Hahn M.  
Spring Simulation Interoperability Workshop 2013, SIW 2013, San Diego, CA, United States Of America, 8 - 12 April 2013, pp.123-133
- XLIV. **Data and Behavior Decomposition for the Model-Driven Development of an Executable Simulation Model**  
Ozhan G., Oguztuzun H.  
Symp on Theory of Modeling and Simulation - DEVS Integrative M and S Symp (DEVS 2013) / Spring Simulation Multi-Conference (SpringSim '13), California, United States Of America, 7 - 10 April 2013, vol.45, pp.153-161
- XLV. **Evidential location estimation for events detected in Twitter**

Özdikiş Ö., OĞUZTÜZÜN M. H. S., KARAGÖZ P.

7th Workshop on Geographic Information Retrieval, GIR 2013, Orlando, FL, United States Of America, 05 November 2013, pp.9-16

- XLVI. **Model based approach to the federation object model independence problem**  
Uluat M. F., Oğuztüzün H.  
26th Annual International Symposium on Computer and Information Science, ISCIS 2011, London, United Kingdom, 26 - 28 September 2011, pp.451-459
- XLVII. **Semantic Expansion of Tweet Contents for Enhanced Event Detection in Twitter**  
Ozdikis O., Senkul P., Oguztuzun H.  
IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, İstanbul, Turkey, 26 - 29 August 2012, pp.20-24
- XLVIII. **Kutulu: A Domain-specific Language for Feature-driven Product Derivation**  
Dayibas O., Oguztuzun H.  
36th Annual IEEE International Computer Software and Applications Conference (COMPSAC), İzmir, Turkey, 16 - 20 July 2012, pp.105-110
- XLIX. **Generating simulation code from federation models: A field artillery case study**  
Özhan G., Oğuztüzün H.  
2011 Summer Simulation Multiconference, SummerSim'11, Co-located with the 2011 SISO European Simulation Interoperability Workshop, Euro SIW, The Hague, Netherlands, 27 - 30 June 2011, pp.60-70
- L. **Transforming cross-tree relations involving attributes into basic constraints in feature models**  
KARATAŞ A. S., Oğuztüzün H., Doğru A.  
2011 5th International Conference on Application of Information and Communication Technologies, AICT 2011, Baku, Azerbaijan, 12 - 14 October 2011
- LI. **Merging multi-view feature models by local rules**  
Aydin E. A., Oğuztüzün H., DOĞRU A. H., Karataş A. S.  
9th ACIS International Conference on Software Engineering Research, Management and Applications, SERA 2011, Baltimore, MD, United States Of America, 10 - 12 August 2011, pp.140-147
- LII. **Implementation of X-Tree with 3D Spatial Index and Fuzzy Secondary Index**  
Keskin S., YAZICI A., Oguztuzun H.  
9th International Conference on Flexible Query Answering Systems (FQAS 2011), Ghent, Belgium, 26 - 28 October 2011, vol.7022, pp.72-83
- LIII. **Multi-Layered. Simulation Architecture: A Practical Approach**  
Topcu O., Oguztuzun H.  
26th Annual International Symposium on Computer and Information Science, London, Canada, 26 - 28 September 2011, pp.439-443
- LIV. **FMML: A Feature Model Markup Language**  
NABDEL L., Karatas A. S., Oguztuzun H., Dogru A.  
International Conference on Numerical Analysis and Applied Mathematics (ICNAAM), Halkidiki, Greece, 19 - 25 September 2011, vol.1389
- LV. **An Ontology for a Naval Wargame Conceptual Model**  
Kars S., Oguztuzun H.  
5th International Conference on Metadata and Semantic Research, İzmir, Turkey, 12 - 14 October 2011, vol.240, pp.1-2
- LVI. **Model-integrated development of field artillery federation object model**  
Özhan G., Dinç A. C., Oğuztüzün H.  
2nd International Conference on Advances in System Simulation, SIMUL 2010, Nice, France, 22 - 27 August 2010, pp.109-114
- LVII. **Tool support for transformation from an OWL ontology to an HLA Object Model**  
ÖZDİKİŞ Ö., DURAK U., OĞUZTÜZÜN M. H. S.  
Proceedings of the 3rd International ICST Conference on Simulation Tools and Techniques, Malaga, Spain, 15 - 19 March 2010

- LVIII. Mapping Extended Feature Models to Constraint Logic Programming over Finite Domains**  
 KARATAS A. S., OGUZTUZUN H., Dogru A. H.  
 14th International Software Product Lines Conference, Jeju Island, South Korea, 13 - 17 September 2010, vol.6287, pp.286-299
- LIX. Global Constraints on Feature Models**  
 KARATAS A. S., OGUZTUZUN H., Dogru A. H.  
 16th Annual International Conference on the Principles and Practice of Constraint Programming, St Andrews, United Kingdom, 6 - 10 September 2010, vol.6308, pp.537-551
- LX. Verifying the interface compliance of federates using pre- and postconditions of RTI services**  
 Kizilay V., Oğuztüzün H., Topçu O., Buzluca F.  
 Fall Simulation Interoperability Workshop 2009, 2009 Fall SIW, Orlando, FL, United States Of America, 21 - 25 September 2009, pp.451-458
- LXI. Variable structure and dynamism extensions to SiMA, a DEVS based modeling and simulation framework**  
 Deniz F., Kara A., Nedim Alpdemir M., Oğuztüzün H.  
 Summer Computer Simulation Conference 2009, SCSC 2009, Part of the 2009 International Summer Simulation Multiconference, ISMc, İstanbul, Turkey, 13 - 16 June 2009, vol.41, pp.117-124
- LXII. User-guided transformations for ontology based simulation design**  
 Özdikiş Ö., Durak U., Oğuztüzün H.  
 Summer Computer Simulation Conference 2009, SCSC 2009, Part of the 2009 International Summer Simulation Multiconference, ISMc, İstanbul, Turkey, 13 - 16 June 2009, vol.41, pp.75-82
- LXIII. ANIMATION OF BEHAVIORAL SPECIFICATIONS THROUGH CODE GENERATION FOR A PAYMENT SYSTEM**  
 Deniz O., Adak M., Oguztuzun H.  
 4th Balkan Conference in Informatics, Thessaloniki, Greece, 17 - 19 September 2009, pp.53-54
- LXIV. Federation architecture modeling: A case study with NSTMSS**  
 Molla A., Sarioğlu K., Topçu O., Adak M., Oğuztüzün H.  
 Fall Simulation Interoperability Workshop 2007, Orlando, FL, United States Of America, 16 - 21 September 2007, vol.2, pp.1552-1568
- LXV. A MASHUP BASED STRATEGY FOR MİGRATION TO SERVICE ORİENTED COMPUTİNG**  
 Çetin S., N İlker A., OGUZTÜZÜN M. H. S., DOĞRU A. H., Tüfekçi Ö., Selma S.  
 IEEE International Conference on Pervasive Services, 15 - 20 July 2007
- LXVI. An exercise in ontology driven trajectory simulation with MATLAB Simulink (R)**  
 Durak U., Guler S., Oguztuzun H., Ider S. K.  
 21st European Conference on Modelling and Simulation, Prague, Czech Republic, 4 - 06 June 2007, pp.435-437
- LXVII. A mashup-based strategy for migration to service-oriented computing**  
 CETIN S., ALTINTAS N. I., OGUZTUZUN H., Dogru A. H., TUFEKCI O., SULOGLU S.  
 IEEE International Conference on Pervasive Services, İstanbul, Turkey, 15 - 20 July 2007, pp.169-170
- LXVIII. An exercise in ontology driven trajectory simulation with Matlab Simulink®**  
 Durak U., Güler S., Oğuztüzün H., Ider S. K.  
 21st European Conference on Modelling and Simulation, ECMS 2007, Prague, Czech Republic, 4 - 06 June 2007, pp.435-440
- LXIX. Legacy migration to Service-Oriented Computing with mashups**  
 Cetin S., Altintas N. I., Oguztuzun H., DOĞRU A. H., Tufekci O., SÜLOĞLU S.  
 2nd International Conference on Software Engineering Advances - ICSEA 2007, Cap Esterel, France, 25 - 31 August 2007, pp.21-30
- LXX. An ontology for trajectory simulation**  
 Durak U., Oguztuzun H., Ider S. K.  
 2006 Winter Simulation Conference, Monterrey, Mexico, 3 - 06 December 2006, pp.1160-1162
- LXXI. Model-integrated development of HLA-based field artillery simulation**  
 Özhan G., Oğuztüzün H.

- European Simulation Interoperability Workshop 2006, Stockholm, Sweden, 19 - 22 June 2006, pp.191-200
- LXXII. **LEGACY MİGRATION TO SERVICE ORIENTED COMPUTİNG WITH MASHUPS**  
Çetin S., N İlker A., OĞUZZÜZÜN M. H. S., DOĞRU A. H., Tüfekçi Ö., Selma S.  
the Second International Conference on Software Engineering Advances (ICSEA), 25 - 31 August 2006
- LXXIII. **A metamodel for the HLA object model**  
Cetinkaya D., Oguztuzun H.  
20th European Conference on Modelling and Simulation, Bonn, Germany, 28 - 31 May 2006, pp.207-208
- LXXIV. **Domain analysis for Reusable Trajectory Simulation**  
Durak U., Mahmutyaziciođlu G., Ođuztüzün H.  
European Simulation Interoperability Workshop 2005, Toulouse, France, 27 - 29 June 2005, pp.288-297
- LXXV. **Towards a UML profile for hla federation design, part II**  
Topcu O., Oguztuzun H., Hazen M. G.  
2003 Summer Computer Simulation Conference, SCSC 2003, Montreal, Canada, 20 - 24 July 2003, vol.35, pp.874-879
- LXXVI. **Analysis of dead reckoning procedures by using hybrid automata**  
Ozutam B., Oguztuzun H.  
3rd IEEE International Workshop on Distributed Interactive Simulation and Real-Time Applications, DiS-RT 1999, Maryland, United States Of America, 22 - 23 October 1999, pp.22-29
- LXXVII. **A fragment of first order logic adequate for observation equivalence**  
Oguztüzün H.  
5th Workshop on Computer Science Logic, CSL 1991, Bern, Switzerland, 7 - 11 October 1991, pp.278-292

## Supported Projects

OĐUZZÜZÜN M. H. S., TUBITAK Project, Dinamik Ürün Hatlarında Otonom Evrim, 2016 - 2018

OĐUZZÜZÜN M. H. S., TUBITAK Project, Twitr Türkçe için Sosyal Ağlarda Olay Bulma ve Bulunan Olaylar için Konum Tahmini, 2013 - 2015

## Metrics

Publication: 127

Citation (WoS): 364

Citation (Scopus): 597

H-Index (WoS): 11

H-Index (Scopus): 13

## Invited Talks

Agent Based Modeling for Constructive Simulation of Naval Tactics, Conference, 19th Int Bhurban Conf on Applied Sciences & Technology, Pakistan, August 2022

## Non Academic Experience

METU

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