Geylani Kardaş, Ph.D.
Associate Professor
Ege University
International Computer Institute
Bornova Metro Duragi Karsisi, 35100 Bornova / IZMIR, TURKEY

Work Tel: 90-232-3113223  Mobile: 90-555-3685360
E-mail: geylani.kardas@ege.edu.tr  Web: http://ube.ege.edu.tr/~kardas
geylani@gmail.com

CURRENT RESEARCH INTERESTS
- Agent-oriented Software Engineering
- Model-driven development of software systems
- Domain-specific (modeling) languages (DSLs / DSMLs)
- Semantic Web and Semantic Web Services
- Software development processes and methodologies

PUBLICATIONS
Journal Articles


Conference and Workshop Papers


10.1109/ITNG.2007.21.


Dissertation and Theses


PROFESSIONAL ACTIVITIES

- Currently participating in the following projects:
  
  [1] “AgentDSM-Eval: Developing a Framework on Evaluating Domain-specific Modeling Languages for Multi-agent Systems", 01.03.2017 – 01.03.2020, the Scientific and Technological Research Council of Turkey (TUBITAK) Academic Research Funding Program Directorate (ARDEB) Electrical, Electronics and Informatics Research Grant Committee (EEEAG) and the Portuguese Foundation for Science and Technology (FCT) funded bilateral research project (with project no: 115E591 and budget: $91,000) (working as the principal investigator) (acceptance rate of the related bilateral project call: 6%)

  [2] “Supporting the Interoperability between Domain-specific Agent Modeling Languages with Horizontal Model Transformations", 01.06.2016 – 01.06.2018, Research project funded by the Scientific Research Projects Directorate of Ege University (with project no: 16-UBE-001 and budget: $13,200) (working as the principal investigator)


- Completed projects:
  
  [1] “ModelWriter: Text & Model-Synchronized Document Engineering Platform", 01.10.2014 – 01.10.2017, European Union (EU) EUREKA Information Technology for European Advancement (ITEA) labelled research and development project including 9 project partners from France and Turkey (ITEA project no: 13028 and budget: €4,451,000) (worked as the consultant for the project partner KocSistem Information Communication Services Inc.) (This project was also supported by TUBITAK Technology and Innovation Funding Programs Directorate (TEYDEB)
with project no: 9140014 and budget: $1,573,000)


[3] “Model Driven Development of Composite Content Applications”, 01.09.2012 – 01.01.2014, KocSistem Information Communication Services Inc. and Unit Information Technologies Research, Development and Automation Systems Co.’s bilateral industrial research and development project supported by TUBITAK TEYDEB (with project no: 3110712 and budget: $460,000) (worked as the consultant)


[5] “A Domain Specific Modeling Language for Semantic Web enabled Multi-agent Systems”, 01.03.2010 – 01.03.2013, TUBITAK ARDEB-EEEAG and Slovenian Research Agency (ARRS) funded bilateral research project (with project no: 109E125 and budget: $86,000) (received TUBITAK Project Performance Award in 2017) (worked as the principal investigator)


[7] “Model Driven Development of Ontology Based Multi-Agent Systems”, 01.10.2008 – 01.10.2010, TUBITAK ARDEB-EEEAG funded research project (with project no: 108E141 and budget: $90,000) (worked as the researcher)


- Industrial consultancies for the following corporations:
  - KocSistem Information Communication Services Inc. (since May 2015)
  - Kentkart Ege Electronics Automatic Fare Collection & Vehicle Tracking Systems Co. (December 2012 – December 2014)
Unit Information Technologies Research, Development and Automation Systems Co. (November 2012 – December 2013)

− Editorial board member of Computer Languages, Systems & Structures journal


− Management committee substitute member of European Cooperation in Science & Technology (COST) Action IC1404: Multi-Paradigm Modelling for Cyber-Physical Systems (MPM4CPS)


− Reviewer for the following journals:
  - Applied Soft Computing
  - Computers & Industrial Engineering
  - Computer Languages, Systems & Structures
  - Computer Science and Information Systems
  - Computer Standards & Interfaces
  - Computer Systems Science & Engineering
  - DUMF Journal of Engineering
  - Engineering Applications of Artificial Intelligence
  - IEEE Access
  - IEEE Transactions on Knowledge and Data Engineering
  - IET Software
  - International Journal of Agent-Oriented Software Engineering
  - International Journal of Informatics Technologies
  - International Journal of Software Engineering and Knowledge Engineering
  - Journal of Experimental & Theoretical Artificial Intelligence
  - Journal of Software: Evolution and Process
  - Science of Computer Programming
  - Software Quality Journal
  - Turkish Journal of Electrical Engineering & Computer Sciences

− Organizing committee memberships:
  - Doctoral and Master of Science Mentoring Program at 9th Turkish National Software Engineering Symposium (UYMS 2015), September 9-11, 2015, Izmir, Turkey
  - 15th Turkish Symposium on Artificial Intelligence and Neural Networks (TAINN 2006), June 21-24, 2006, Akyaka, Mugla, Turkey

− Program committee memberships:
  - 33rd ACM SIGAPP Symposium on Applied Computing (SAC 2018), Technical Track on Programming Languages, April 9-13, 2018, Pau, France
  - 10th International Conference on Agents and Artificial Intelligence (ICAART 2018), January 16-18, 2018, Madeira, Portugal
  - 11th Turkish National Software Engineering Symposium (UYMS 2017), October
18-20, 2017, Antalya, Turkey
• 5th Workshop on Advances in Programming Languages (WAPL 2017), held in conjunction with 2017 Federated Conference on Computer Science and Information Systems (FedCSIS 2017), September 4-7, 2017, Prague, Czech Republic
• 6th Symposium on Languages, Applications and Technologies (SLATE 2017), Track on Human-Computer Languages, June 26-27, 2017, Vila do Conde, Portugal
• 32nd ACM SIGAPP Symposium on Applied Computing (SAC 2017), Technical Track on Programming Languages, April 3-6, 2017, Marrakech, Morocco
• 9th International Conference on Agents and Artificial Intelligence (ICAART 2017), February 24-26, 2017, Porto, Portugal
• 10th Turkish National Software Engineering Symposium (UYMS 2016), October 24-26, 2016, Canakkale, Turkey
• 2nd International Workshop on Human Factors in Modeling (HuFaMo 2016), held in conjunction with the ACM/IEEE 19th International Conference on Model Driven Engineering Languages and Systems (MODELS 2016), October 2 - 7, 2016, Saint-Malo, France
• 6th Turkish Software Architecture Conference (UYMK 2016), September 12-13, 2016, Istanbul, Turkey
• 4th Workshop on Model Driven Approaches in System Development (MDASD 2016), held in conjunction with 2016 Federated Conference on Computer Science and Information Systems (FedCSIS 2016), September 11-14, 2016, Gdansk, Poland
• 10th International Conference on the Quality of Information and Communications Technology (QUATIC 2016), Thematic Track on Quality Aspects in Model Driven Engineering, September 6-9, 2016, Lisbon, Portugal
• 5th Symposium on Languages, Applications and Technologies (SLATE 2016), Track on Human-Computer Languages, June 20-21, 2016, Maribor, Slovenia
• 31st ACM/SIGAPP Symposium on Applied Computing (SAC 2016), Technical Track on Programming Languages, April 4-8, 2016, Pisa, Italy
• 8th International Conference on Agents and Artificial Intelligence (ICAART 2016), February 24-26, 2016, Rome, Italy
• 1st International Workshop on Human Factors in Modeling (HuFaMo 2015), held in conjunction with the ACM/IEEE 18th International Conference on Model Driven Engineering Languages and Systems (MODELS 2015), September 27 - October 2, 2015, Ottawa, Canada
• 5th Workshop on Advances in Programming Languages (WAPL 2015), held in conjunction with 2015 Federated Conference on Computer Science and Information Systems (FedCSIS 2015), September 13-16, 2015, Lodz, Poland
• 9th Turkish National Software Engineering Symposium (UYMS 2015), September 9-11, 2015, Izmir, Turkey
• 30th ACM/SIGAPP Symposium on Applied Computing (SAC 2015), Technical Track on Programming Languages, April 13-17, 2015, Salamanca, Spain
• 7th International Conference on Agents and Artificial Intelligence (ICAART 2015), January 10-12, 2015, Lisbon, Portugal
• 5th Turkish Software Architecture Conference (UYMK 2014), December 3-5, 2014, Ankara, Turkey
• 9th International Conference on the Quality of Information and Communications Technology (QUATIC 2014), Thematic Track on Quality in Model Driven Engineering, September 23-26, 2014, Guimaraes, Portugal
• 8th Turkish National Software Engineering Symposium (UYMS 2014), September 8-10, 2014, Guzelyurt, KKTC
• 3rd Workshop on Model Driven Approaches in System Development (MDASD
2014), held in conjunction with 2014 Federated Conference on Computer Science and Information Systems (FedCSIS 2014), September 7-10, 2014, Warsaw, Poland

- International Workshop on DSL Architecting and DSL-based Architectures (DADA 2014), held in conjunction with the 8th European Conference on Software Architecture (ECSA 2014), August 25-29, 2014, Vienna, Austria
- 29th ACM Symposium on Applied Computing (SAC 2014), Technical Track on Programming Languages, March 24-28, 2014, Gyeongju, South Korea
- 6th International Conference on Agents and Artificial Intelligence (ICAART 2014), March 6-8, 2014, Loire Valley, France
- 7th Turkish National Software Engineering Symposium (UYMS 2013), September 26-28, 2013, Izmir, Turkey
- 4th Workshop on Advances in Programming Languages (WAPL 2013), held in conjunction with 2013 Federated Conference on Computer Science and Information Systems (FedCSIS 2013), September 8-11, 2013, Krakow, Poland
- 28th ACM Symposium on Applied Computing (SAC 2013), Technical Track on Programming Languages, March 18-22, 2013, Coimbra, Portugal
- 5th International Conference on Agents and Artificial Intelligence (ICAART 2013), February 15-18, 2013, Barcelona, Spain
- 4th Turkish Software Architecture Conference (UYMK 2012), December 7-8, 2012, Izmir, Turkey
- 2nd Workshop on Model Driven Approaches in System Development (MDASD 2012), held in conjunction with 2012 Federated Conference on Computer Science and Information Systems (FedCSIS 2012), September 9-12, 2012, Wroclaw, Poland
- 6th Turkish National Software Engineering Symposium (UYMS 2012), May 30-June 1, 2012, Ankara, Turkey
- 5th Turkish National Software Engineering Symposium (UYMS 2011), September 26-28, 2011, Ankara, Turkey
- 3rd Turkish Software Architecture Conference (UYMK 2010), November 4-5, 2010, Ankara, Turkey
- 2nd Turkish Workshop on Model-Driven Software Development (TMODELS 2010), May 22, 2010, Ankara, Turkey
- 4th Turkish National Software Engineering Symposium (UYMS 2009), October 8-10, 2009, Istanbul, Turkey
- 1st International Workshop on Sensor Security (IWSS 2009), held in conjunction with the 4th International Conference on Availability, Reliability and Security (ARES 2009), March 16-19, 2009, Fukoka, Japan

- Administrative duties:
  - Vice Director of Ege University International Computer Institute (since January 2017)
  - Member of Ege University International Computer Institute Directorate Board (since September 2009)
  - Member of Ege University International Computer Institute Academic Assessment and Quality Improvement Committee (since December 2009)
  - Member of Ege University International Computer Institute Academic Encouragement Application Pre-Assessment Committee (since January 2016)
  - Member of Ege University International Computer Institute Scientific Research Projects Committee (since September 2017)

- Member of Association for Computing Machinery (ACM)
- Panelist in the evaluation meetings of the research project proposals submitted to TUBITAK ARDEB-EEEAG

- External consultant for the research project proposals submitted to TUBITAK ARDEB-EEEAG

- Referee for the assessment of the industrial research & development (R&D) project proposals submitted to TUBITAK TEYDEB

- Inspector for the industrial R&D projects supported by TUBITAK TEYDEB

- Referee for the assessment of the entrepreneurs’ business ideas submitted to TUBITAK TEYDEB

- Concept advisor for Science Center Support Programme of TUBITAK Science and Society Department (BTDB)

- External consultant for the undergraduate national/international research project proposals submitted to TUBITAK Science Fellowships and Grant Programmes Department (BIDEB)

- External consultant for the industry-focused undergraduate research project proposals submitted to TUBITAK BIDEB

- Panelist in the evaluation meeting of the research scholarship applications submitted for the International Research Fellowship Programme of TUBITAK BIDEB

- Field committee member for the Technology Development Foundation of Turkey (TTGV)

- Committee member for the assessment of R&D center applications submitted to the Republic of Turkey - Ministry of Science, Industry and Technology

- Committee member for the inspection of the R&D centers supported by the Republic of Turkey - Ministry of Science, Industry and Technology

- Referee for the assessment of R&D center applications submitted to the Republic of Turkey - Ministry of Science, Industry and Technology

- Inspector for the R&D centers supported by the Republic of Turkey - Ministry of Science, Industry and Technology

- Committee member for the assessment of applications submitted to the Techo-entrepreneur Programme of the Republic of Turkey - Ministry of Science, Industry and Technology

- Referee for the assessment of the projects funded by the Scientific Research Projects Directorate of Ege University

- Jury member for the assessment of faculty member applications

- Jury member for the assessment of the computer science undergraduate students’ projects submitted to the series of Young Brains New Ideas Project Contest
Jury member for the assessment of the projects submitted to the 2012 Inter-High School Science and Engineering Project Contest organized by Izmir University of Economics and Republic of Turkey – Ministry of National Education

WORK EXPERIENCE

**Associate Professor**
since March 2016  
Ege University International Computer Institute, Izmir, TURKEY

- Courses taught: “Multi-agent Systems”, “Object-oriented Programming”, “Data Structures and Algorithms” and “Programming Languages”

**Consultant (Part-time)**
since May 2015  
KocSistem Information Communication Services Inc., Istanbul, TURKEY

- Participated mainly in EU EUREKA ITEA labelled and TUBITAK TEYDEB funded R&D project: “ModelWriter: Text & Model-Synchronized Document Engineering Platform”

**Consultant (Part-time)**
December 2012 – December 2014  
Kentkart Ege Electronics Automatic Fare Collection & Vehicle Tracking Systems Co., Izmir, TURKEY

- Participated mainly in TUBITAK TEYDEB funded R&D project: “Development of a CANBus-based Ecodriving System for Public Transport Bus Services”

**Consultant (Part-time)**
November 2012 – December 2013  
Unit Information Technologies Research, Development and Automation Systems Co., Izmir, TURKEY

- Participated mainly in TUBITAK TEYDEB funded R&D project: “Model Driven Development of Composite Content Applications”

**Assistant Professor**
June 2009 – February 2016  
Ege University International Computer Institute, Izmir, TURKEY


**Research Assistant**
June 2004 – June 2009  
Ege University International Computer Institute, Izmir, TURKEY


**Research Assistant**
December 2001 – August 2003  
Ege University International Computer Institute, Izmir, TURKEY


**Software Developer (Part-time)**
November 2000 – March 2001  
Tema Computer Inc., Izmir, TURKEY

- Participated mainly in design and implementation of commercial web sites

EDUCATION

**Ph.D. in Information Technologies**, Ege University Graduate School of Natural and Applied Sciences, Izmir, TURKEY

- **GPA:** 93.86 / 100
- **Graduate Dissertation**: Model Driven Development of Semantic Web Enabled Multi-agent Systems
  - Introducing a new reference software architecture for Semantic Web enabled Multi-agent Systems (MASs)
  - Definition of a platform independent MAS metamodel in which agent and semantic web service interactions are especially considered
  - Introducing a model driven agent software development process in which both model to model (M2M) and model to text (M2T) transformation steps are included
  - Evaluation of the proposed M2M and M2T transformations by considering development of real MAS applications for two different MAS software frameworks
  - Thesis (written in Turkish) can be found at: [http://ube.ege.edu.tr/~kardas/resources/DoktoraTezi.pdf](http://ube.ege.edu.tr/~kardas/resources/DoktoraTezi.pdf)

September 2001 – August 2003  M.Sc. in Information Technologies, Ege University Graduate School of Natural and Applied Sciences, Izmir, TURKEY
- **GPA**: 88.13 / 100
- **Graduate Thesis**: Use of Smart Cards in Health Records
  - Design and implementation of a healthcare information system architecture based on smart card technology
  - Design and implementation of a distributed object protocol in which smart cards participate in data transmission, data security and system authentication tasks
  - Use of JavaCard and Java RMI technologies in implementation
  - More information can be available at: [http://ube.ege.edu.tr/~kardas/master](http://ube.ege.edu.tr/~kardas/master)

September 1997 – August 2001  B.Sc. in Computer Engineering, Ege University Computer Engineering Department, Izmir, TURKEY
- **GPA**: 80.95 / 100
- **Graduate Thesis**: A Web Based Hotel Reservation System
  - Development of an n-tier client / server application using Model-View-Controller architectural pattern
  - E-business application approach and object oriented system analysis and design
  - System implementation by using Java Servlet, JSP, Java Bean, Java Mail technologies, concurrent multi-thread architecture and Oracle database

September 1994 – February 1997  High School, Bornova Anatolian High School, Izmir, TURKEY
- **GPA**: 4.55 / 5
- **Education Language**: English  **Branch In High School**: Science

**AWARDS, GRANTS and SCHOLASTIC ACHIEVEMENTS**

(2015) The rank of Associate Professor in Computer-Information Science and Engineering field, achieved from the Republic of Turkey - Inter-University Council (ÜAK)

Awards:
- (2017) TUBITAK Project Performance Award
- (2016) “Excellence Award”, awarded by Elsevier Science Publisher B.V.’s Computer Languages, Systems & Structures journal in recognition of the significant contributions made to the quality of the journal
- (2016) Ege University Science and Technology Center (EBIبت) Project Application Award
- (2015) TUBITAK Turkish Academic Network and Information Centre (ULAKBIM) International Scientific Publication Promotion
- (2015) EBILTEM Publication Award
- (2014) TUBITAK ULAKBIM International Scientific Publication Promotion (for 4 publications)
- (2014) EBILTEM Publication Award (for 4 publications)
- (2009) TUBITAK ULAKBIM International Scientific Publication Promotion
- (2008) EBILTEM Publication Award
- (2007) TUBITAK ULAKBIM International Scientific Publication Promotion (for 3 publications)
- (2007) EBILTEM Publication Award (for 4 publications)
- (2006) TUBITAK International Scientific Publication Promotion
- (2006) EBILTEM Publication Award (for 6 publications)

Grants:
- For project / research grants, please refer to professional activities section.
- (2007) EBILTEM Grant for participating in Fifth German conference on Multi-Agent System Technologies (MATES 2007) Leipzig, Germany
- (2007) TUBITAK BIDEB Grant for participating in Fifth German conference on Multi-Agent System Technologies (MATES 2007) Leipzig, Germany
- (2006) TUBITAK BIDEB Grant for participating in Net.ObjectDays 2006, Erfurt, Germany

Scholarship:
- (2006) TUBITAK BIDEB Ph.D. Scholarship (for 4 years)

Other Achievements:
- Co-authored article, called “A model driven architecture for the development of smart card software”, was ranked 2nd on Elsevier Science Publisher B.V.’s ScienceDirect Top 25 List of Most Downloaded Articles for “Computer Languages, Systems & Structures” journal during the entire year 2014.
- Co-authored article, called “Design and implementation of a smart card based healthcare information system”, was ranked 2nd on Elsevier Science Publisher B.V.’s ScienceDirect Top 25 List of Most Downloaded Articles for “Computer Methods and Programs in Biomedicine” journal between January to March 2006.

STUDENTS

Graduated Ph.D. Students:
- Moharram Challenger, Ph.D., 2016
  *Dissertation Title*: A Domain-specific Modeling Language for Semantic Web enabled Multi-agent Systems
  *Position after graduation*: Postdoc researcher at Information Technology Group, Wageningen University, the Netherlands
  R&D Director of Unit Information Technologies Research, Development and Automation Systems Co., Turkey

Graduated M.Sc. Students:
- Emine Bircan, M.Sc., 2017
Thesis Title: Horizontal Transformations between Platform Independent Metamodels of Software Agents

Position after graduation: Computer Engineer in TUBITAK National Research Institute of Electronics and Cryptology (UEKAE), Turkey

- Miray Tosun, M.Sc., 2015

Thesis Title: A Methodology for the Automatic Generation of JavaCard Software

Position after graduation: Software Engineer in R&D Center of OBASE Computer and Consultancy Co., Turkey

- Kemal Deniz Teket, M.Sc., 2013

Thesis Title: Agent-based Parent Selection in Peer-to-Peer Mesh-based Video Streaming Systems

Position after graduation: Ph.D. Student at Laboratoire d'Informations en Image et Systèmes d'Information (LIRIS), Institut national des sciences Appliquées de Lyon (INSA Lyon), France

- Orcun Yildirim, M.Sc., 2012

Thesis Title: A Mobile Agent-based Decision Support System for Cement Industry

Position after graduation: Industrial Engineer in Cimentas Group, Turkey

- Sinem Getir, M.Sc., 2012

Thesis Title: Semantics of a Domain-specific Modeling Language for Semantic Web enabled Multi-agent Systems

Position after graduation: Ph.D. Student at Institute of Software Technology, Universität Stuttgart, Germany

- Suleyman Yildirim, M.Sc., 2012

Thesis Title: An Agent Architecture for Peer-to-Peer Live Video Streaming Applications

Position after graduation: Post-M.Sc. Software Designer Trainee at 3TU.School for Technological Design, Stan Ackermans Institute, Eindhoven University of Technology, the Netherlands

- Selbela Demirkol, M.Sc., 2012

Thesis Title: Syntax of a Domain-specific Modeling Language for Semantic Web enabled Multi-agent Systems

Position after graduation: Software Developer at Veripark Co., Turkey

- Hidayet Burak Saritas, M.Sc., 2011

Thesis Title: Model-based Engineering for the Development of Smart Card Software

Position after graduation: Software Developer at Kentkart Ege Electronics Automatic Fare Collection & Vehicle Tracking Systems Co., Turkey

- Ferhat Erata, M.Sc., 2010

Thesis Title: A Platform-specific Metamodel for Developing Web-based Systems

Position after graduation: Co-founder and president of Unit Information Technologies Research, Development and Automation Systems Co., Turkey

Graduated M.Sc. Non-Thesis Students:

- Hamit Unugur, M.Sc., 2014

Graduation Project Title: Assessment of the Semantic Service Discovery Methods on Mobile Platforms

Position after graduation: Software Developer in MAN Turkey Co., Turkey

- Ozge Ozkaya, M.Sc., 2013

Graduation Project Title: A Study on the RESTful Web Services

Position after graduation: Responsible of Ege University International Computer Institute’s PC Laboratory, Turkey

- Dincer Can, M.Sc., 2013
Graduation Project Title: A Software that Records and Displays Optical Disc Contents

Position after graduation: Information Technology Teacher at Republic of Turkey - Ministry of National Education, Turkey

PERSONAL INFORMATION
Nationality: Republic of Turkey
Birth Date: June 18, 1979
Marital Status: Married
Foreign Language: English

REFERENCES
• Prof. Dr. Marjan Mernik
  University of Maribor, Institute of Computer Science, Smetanova ul. 17 SI-2000 Maribor, SLOVENIA
  e-mail: marjan.mernik@uni-mb.si
  tel: 386 2 - 220 74 55

• Prof. Dr. Oguz Dikenelli
  Ege University, Computer Engineering Department, 35100 Bornova / Izmir, TURKEY
  e-mail: oguz.dikenelli@ege.edu.tr
  tel: 90 - 232 - 388 72 21 - 3083

• Prof. Dr. E. Turhan Tunali
  Dean of the Engineering and Computer Sciences Faculty
  Izmir University of Economics, Sakarya Cad. No: 156 Balçova / Izmir, TURKEY
  e-mail: turhan.tunali@ieu.edu.tr
  tel: 90 - 232 - 488 85 53

• Assoc. Prof. Dr. Sule Yildirim
  Gjøvik University College, Faculty of Computer Science and Media Technology, Po. Box. 191, 2802 Gjøvik, NORWAY
  e-mail: suley@hig.no
  tel: 47 - 611 35 442