ATILIM UNIVERSITY

Damla Topalli, Ph.D.

Atılım University
Department of Computer Engineering
06830 İncek, Gölbaşı, Ankara/TURKEY
damla.topalli@atilim.edu.tr
Tel: +90 312 586 83 62

PERSONAL

Date of Birth	1986
Place of Birth	Samsun, TURKEY

EDUCATION

2013 - 2018	Atilim University, Software Engineering, Ph.D.
2011 - 2013	Atilim University, Computer Engineering, M.S.
2005 - 2009	Baskent University, Computer Engineering, B.S.

ACADEMIC POSITIONS

10/2010 - 03/2019	Research Assistant, Department of Computer Engineering, Atilim University, Turkey
04/2019 -	Assistant Professor, Department of Computer Engineering, Atilim University, Turkey

ADMINISTRATIVE DUTIES

1	Bologna Coordinator, Department of Computer Engineering (September 2018-)
2	MUDEK Accreditation Coordinator, Department of Computer Engineering (September 2020-)

HONORS&AWARDS

1	Post-Doctorate Fellowship Grant - ERCIM Alain Bensoussan FP 2019 (2)

RESEARCH INTERESTS

1	Software Engineering
2	Database Management Systems
3	Data Mining
4	Human-Computer Interaction

PUBLICATIONS

A. Papers in International Journals (SCI, SCI-E, and AHCI)

A7	Eryilmaz M., Kalem G., Kilic H., Tirkes G., **Topalli D**., Turhan C., Alakus B and Yazici A. (2022) Online Learning Perceptions amid COVID-19 Pandemic: The Engineering Undergraduates' Perspective. International Journal of Engineering Education, Vol. 38, No. 2, pp. 408–420.
A6	Ozcan, E., **Topalli, D**., Tokdemir, G., & Cagiltay, N. E. (2021). A user task design notation for improved software design. PeerJ Computer Science, 7, e503.
A5	**Topalli, D.,** & Cagiltay, N. E. (2019). Classification of Intermediate and Novice Surgeons' Skill Assessment Through Performance Metrics. Surgical innovation, 1553350619853112. Volume: 26 issue: 5, page(s): 621-629.
A4	**Topalli, D.,** & Cagiltay, N.E. (2018). Eye-Hand Coordination Patterns of Intermediate and Novice Surgeons in a Simulation-Based Endoscopic Surgery Training Environment. Journal of Eye Movement Research, 11(6):1. doi: http://dx.doi.org/10.16910/jemr.11.6.1
A3	**Topalli, D.,** & Cagiltay, N. E., Improving programming skills in engineering education through problem-based game projects with Scratch, Computers & Education, 120, 64-74. doi: 10.1016/j.compedu.2018.01.011 (
A2	**Topalli, D.,** Eyüboğlu, B. G., & Cagiltay, N. E. (2018). Understanding the Effect of Handedness on Both-Handed Task Performance: An Experimental Study based on a Haptic-Controlled, Simulation-Based Surgical Skill Training Scenario. International Journal of Human–Computer Interaction, 1-5. doi: 10.1080/10447318.2018.1464283 (Published online: 18 Apr 2018)
A1	Cagiltay, N. E., Tokdemir, G., Kilic, O., & **Topalli, D.** (2013**)** Performing and analyzing non-formal inspections of entity relationship diagram (ERD), Journal of Systems and Software, 86(8), 2184-2195. doi:10.1016/j.jss.2013.03.106

B. Papers in International Conferences/Symposiums

B18	**D. Topalli,** S. Camalan (2019), A Case Study for Comparing Platforms in Image Processing Applications: Segmentation, Filters and Color Models, 6th International Symposium on Engineering, Artificial Intelligence and Applications (ISEAIA2019), Abstract Proceedings, Girne, North Cyprus, pp.47
B17	**D. Topalli,** N.E. Cagiltay (2019), Skill-Based Training through Mobile- and Haptic-Controlled User Interfaces, 6th International Symposium on Engineering, Artificial Intelligence and Applications (ISEAIA2019), Full Paper Proceedings, Girne, North Cyprus, pp.110-114
B16	**D. Topalli,** N.E. Cagiltay (2017), Measuring Difficulty Levels of Simulation-Based Skill Training Tasks: A Case Study for Endoscopic Surgery, 5th International Symposium on Engineering, Artificial Intelligence and Applications (ISEAIA2017), Full Paper Proceedings, Girne, North Cyprus, pp.110-115

B15	**D. Topalli,** S. Camalan, N.E. Cagiltay (2017), Effect of Gender on Performance in a Surgical Simulation Environment, 5th International Symposium on Engineering, Artificial Intelligence and Applications (ISEAIA2017), Full Paper Proceedings, pp.130-134
B14	**D. Topalli,** B.Y. Sahinoglu, O. Senekci, O.C. Tasyurek, N.E. Cagiltay (2017), Skill-Based training: Computer-based and Mobile Environments, 5th International Symposium on Engineering, Artificial Intelligence and Applications (ISEAIA2017), Abstract Proceedings, Girne, North Cyprus, pp.38
B13	**D. Topalli,** N.E. Cagiltay (2017), Gamification in Neurosurgery Education, EDULEARN17 Proceedings, Barcelona, Spain, pp. 6580-6584
B12	**D. Topalli,** N.E. Cagiltay (2017), Using Intelligent Support Systems for Endoscopic Surgery Training: Analysis of Hand Motion, EDULEARN17 Proceedings *(Abstract),* Barcelona, Spain, pp. 6596
B11	N.E.Cagiltay, A. O. Borcek, G.Tokdemir, H. H. Maras, **D. Topalli** (2016), Problems of Gaining Neuronavigation Skills on Surgical Education Programs: A case study in Turkey, E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education , Washington DC, USA, Vol. 2016, No. 1, pp. 602-607
B10	N. E. Cagiltay, **D. Topalli,** M. Berker (2016), Virtual Simulation Technologies in Neurosurgery, In E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, Washington DC, USA, Vol. 2016, No. 1, pp. 608-615
B9	**D. Topalli,** N.E. Cagiltay (2016), Understanding the Effect of Passive View on Surgical Performance in Simulation-Based Endoscopic Surgery Education, ICERI2016 Proceedings, Seville, Spain, pp. 1650-1658
B8	**D. Topalli,** N.E. Cagiltay (2016), Insights for Instructional System Designers by Understanding the Skill Levels of Endoscopic Surgery Education Programs, ICERI2016 Proceedings, Seville, Spain, pp. 1635-1641
B7	N.E. Cagiltay, **D. Topalli,** A.O. Borcek, G. Tokdemir, H.H. Maras, G. Tonbul, E. Aydin (2016), Neuronavigation Skill Training Through Simulation: Insights from Eye Data, ICERI2016 Proceedings, Seville, Spain, pp. 1666-1673
B6	N. E. Cagiltay, **D. Topalli** (2016), Understanding Skill Improvements by Practicing the Usage of Surgical Instruments, ICERI2016 Proceedings, Seville, Spain, pp. 1642-1649
B5	**D. Topalli,** G. Menekse, S. Camalan (2016), Comparison of Software Development Methodologies: An Industrial Case Study in Turkey, The Fourth International Symposium on Engineering, Artificial Intelligence and Applications (ISEAIA 2016) Proceedings, GAU-Girne, North Cyprus, pp.185-196
B4	Topaloglu E., **Topalli D.,** Cagiltay N.E. (2014), Designing Serious Games by Considering Gamer Tasks, 5th International Future-Learning Conference on Innovations in Learning for the Future 2014: e-Learning, İstanbul, Turkey
B3	Çağıltay, N. E., **Topallı, D.,** Aykaç, Y. E., & Tokdemir, G. (2013, October). Abstract conceptual database model approach. In Science and Information Conference (SAI), 2013 (pp. 275-281). IEEE.

B2	**Topalli, D.** & Cagiltay, N., (2012). Implementation of Topic Study Activities in Engineering Education. In 2nd International Engineering Education Conference (IEEC2012) (pp. 125-132).
B1	Ozoran, D., Cagiltay, N., & **Topalli, D.** (2012). Using scratch in introduction to programming course for engineering students. In 2nd International Engineering Education Conference (IEEC2012) (pp. 125-132).

C. Papers in Other Refereed Journals

C1	**D.Topalli,** G.G. Menekse Dalveren, S. Camalan, Comparison of Software Development Methodologies: An Industrial Case Study in Turkey, International Journal of Scientific Research in Information Systems and Engineering (IJSRISE), Vol.3, No.2, 11-19, 2017

D. Papers in National Conferences/Symposiums

D8	**D. Topalli**, S. Camalan, N.E. Cagiltay (2017), Cerrahi Simülasyon Ortamında Cinsiyetin Performansa Etkisi, Proceedings of the 34. TBD National Informatics Symposium, Ankara, Turkey, pp.9-12
D7	E. Tuner, **D. Topalli,** N.E. Cagiltay (2017), Simülasyona Dayalı Cerrahi Eğitim Süreçlerinde Navigasyon Desteğinin Etkisinin Araştırılması, Proceedings of the 34. TBD National Informatics Symposium, Ankara, Turkey, pp.13-16
D6	**D. Topalli,** N.E. Cagiltay (2017), Simülasyon Tabanlı Eğitim Senaryolarının Zorluk Seviyelerinin Hesaplanması, Proceedings of the 34. TBD National Informatics Symposium, Ankara, Turkey, pp.17-20
D5	N.E Cagiltay, **D. Topalli** (2017), Scratch ile Zenginleştirilmiş Bilgisayar Programlamaya Giriş Dersi, 11th International Computer and Instructional Technologies Symposium (ICITS), Abstract Proceedings, pp. 678
D4	N.E Cagiltay, **D. Topalli,** S. Guney (2017), Simülasyon Tabanlı Beceriye Yönelik Eğitim Sistemlerinde Oyunlaştırmanın Etkisi, 11th International Computer and Instructional Technologies Symposium (ICITS), Abstract Proceedings, pp.679
D3	N.E. Cagiltay, **D. Topalli,** A.O. Borcek, G. Tokdemir, H.H. Maras, G. Tonbul, E. Aydin (2016), Nöro-Navigasyon Sistemleri ve Pasif Kullanım Problemi, Medical Technologies National Congress (TIPTEKNO). IEEE., Antalya, Turkey, pp.1-4
D2	B. G. Eyuboglu, **D.Topalli,** N.E. Cagiltay, G.Tonbul (2016), Simulasyon Tabanlı Cerrahi Eğitim Programları ve El Performansı, Medical Technologies National Congress (TIPTEKNO). IEEE., Antalya, Turkey, pp.1-4
D1	Çağıltay N., Tokdemir G., **Topallı D.,** Aykaç Y.E. (2013), Özet Kavramsal Veritabanı Model Yaklaşımı, Proceedings of 6th Engineering and Technology Symposium, Cankaya University

PROJECTS

1	CerrAhi Navigasyon Sistemi (CAN) Project, with support of Tübitak-1003 (11/2013-11/2016) - Scholar
2	LAP-C-1617-06 Endoskopik Cerrahi Egitiminde Akilli Destek Sistemlerinin (Ece-Ads) Kullanimi: El Hareketleri Analizi-Deneysel Gelistirme (11/2016-08/2017) - Coordinator

THESES SUPERVISED

1	Sina Alizadeh Tabrizi. (2021) A Systematic Mapping on the Quality and Understandability of UML Diagrams (M.Sc. Thesis) co-supervisor
2	Shukrullah Atied. (2021) A Systematic Mapping Study on the Use of Eye-Tracking in Program Understandability (M.Sc.Thesis) co-supervisor
3	Omar Khudhur. (2022) The Effect of Pair Programming on the Understandability of Flowcharts: A Case Study in a C Programming Course (M.Sc. Thesis)
4	Abdulbaset Abbas. (2022) Evaluating the Quality Aspects of SQL and NoSQL Databases (M.Sc.Thesis)
5	Yousra Al-Jamel. Emotion Analysis in Arabic and English using Natural Language Processing (Ph.D.Thesis) (co-supervisor)- In Progress
6	Gökçen Tonbul. Understanding Surgical Residents' Behaviors by Analyzing Their Hand Movements in a Simulation-based Training Software (Ph.D.Thesis) (co-supervisor)- In Progress

CITATIONS

Sum of times cited without self-citations (ISI Web of Science):	75
H-index (ISI Web of Science):	2
Sum of times cited without self-citations (Scopus):	104
H-index (Scopus):	3

COURSES GIVEN

Undergraduate Courses:

1	Database Design and Management
2	Data Structures
3	Computer Programming
4	Fundamentals of Computing
5	Multimedia Systems
6	Operating Systems

7	Visual Programming
8	Graphic and Animation (Distance Education-Vocational School)
9	Computer Networks and Internet (Distance Education-Vocational School)

Graduate Courses:

1	Advanced Databases
2	Software Quality Management
3	Advanced Topics in Software Quality Management

COURSES ASSISTED (2010- 2018)

- Algorithms
- Computer Networks
- Data Structures
- Database Design and Management
- Data Warehousing and Mining
- Discrete Computational Structures
- Human Computer Interaction
- Multimedia Systems
- Programming Courses (C, Object-Oriented Programming: C++, Visual Programming)
- Research Methodology and Communication Skills
- Software Requirements Engineering