



## **Background and Publications**

### **Assist. Prof. Dr. Ulaş GÜLEC**

#### **I. Address**

Software Engineering Department

TED University

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#### **II. Education**

1. Bachelor, Çankaya University Computer Engineering Department (2007-2012) – 3.59/4.00 (**Full Scholarship**)
2. Bachelor, Çankaya University Industrial Engineering Department (Double Major) (2009-2012) – 2.84/4.00 (**Full Scholarship**)
3. Master, Çankaya University Computer Engineering Department (2012-2015) – 3.71/4.00 (**Full Scholarship**)
4. Doctorate, Middle East Technical University Computer Engineering Department (2015 - 2018) – 3.21/4.00

#### **III. Research Areas**

1. Game-Based Learning
2. Software Engineering
3. Mobile Education
4. Virtual Reality
5. Augmented Reality

#### **IV. Given Courses**

1. CENG 111 – Fundamentals of Computer Engineering
2. CENG 114 – Computer Programming
3. CENG 124 – Discrete Structures
4. CENG 218 – Data Structures
5. CENG 236 – Numerical Computations
6. CENG 241 – Object Oriented Programming
7. CENG 344 – Introduction to Java Programming
8. CENG 351 – Data Management and File Structure
9. CENG 356 – Database Management Systems
10. CENG 382 – Web Development
11. CENG 383 - Algorithms
12. CENG 497 – Computer Graphics
13. CENG 198 – Introduction to C Programming
14. CENG 161 – Introduction to Computer Science
15. CENG 162 – Introduction to Computer Programming I
16. CENG 407 - Senior Project I (Co-advisor)
17. CENG 408 – Senior Project II (Co-advisor)
18. COME 308 – Web Programming
19. COME 312 – Operating Systems
20. MATH 114 – Discrete Mathematics
21. FE 401 – Multidisciplinary Integrated Project

#### **V. Work Experience**

1. Assist. Prof. Dr., Hasan Kalyoncu University (September 2020 - )
2. Virtual Reality / Augmented Reality Project Advisor, Simsoft Information Technologies (March 2019 - )
3. Assist. Prof. Dr., Hasan Kalyoncu University (March 2019 – September 2020)
4. Project Advisor, DBE – Altay Yazılım (January 2019 – May 2019)
5. Lecturer, Çankaya University (March 2018 – February 2019)
6. Specialist, Çankaya University (March 2013 – March 2018)

7. Computer Engineer, Çankaya Technology Software Company (September 2012 – March 2013)

## **VI. Administrative Functions**

1. Head of Computer Engineering Department, Hasan Kalyoncu University (June 2019 - September 2020)
2. Head of MUDEK Accreditation Committee, Hasan Kalyoncu University (March 2019 - September 2020)
3. Head of BERIC Research Center, Hasan Kalyoncu University (April 2019 - October 2019)
4. Exam Coordinator of Computer Engineering Department, Çankaya University (2013 September – February 2019)
5. Exam Coordinator of Engineering Faculty, Çankaya University (September 2013 - February 2017)
6. Member of Course Evaluation Committee
7. Member of Software Development Committee
8. Member of Social Events Committee
9. Member of Preparing Doctorate Program
10. Journal Manager, Çankaya University Journal of Science and Engineering, (April 2018 – February 2019)
11. Member of Graduation Project Committee
12. Member of MUDEK Accreditation Committee
13. Member of Preparing Software Engineering Department

## **VII. Advisor Projects**

1. Proctor Assignment System, 2014 – 2015
2. Sentiment Analysis on Turkish Tweets, 2015 – 2016
3. The Virtual Environment Designed for the Training of Emergency Medical Intervention Techniques in the Field of War, 2016 – 2017
4. PMLAB: A Serious Game for COE-DAT as a Virtual Policymaking Laboratory, 2017 – 2018

5. Intelligent NGO Management System-I-NGOS, 2018 – 2019
6. A Serious Game and a Virtual/Augmented Reality Based Training Environment for Bomb Disposal Robot, 2018 – 2019
7. Digital Storytelling on a Virtual Heritage Museum with Believable Agents based on Turkish Horror Folklore, 2018 – 2019
8. Simovate, Simsoft
9. PERBIS, DBE – Altay Yazılım
10. Maintenance with Augmented Reality, Simsoft
11. Fire VR, Simsoft
12. Remote Desktop System with Augmented Reality, Simsoft
13. Predictive Maintenance System Supported by Augmented Reality, Simsoft
14. Effective Learning Environment, 2019 – 2020
15. Intelligent Training and Support System for Maintenance with AR (IMAR), Simsoft
16. Tele-Hekim, Simsoft
17. Tüpraş AR, Simsoft
18. Ankara Model Fabrika AR, Simsoft
19. OPET AR, Simsoft

## **VIII. Science Projects**

1. KOBİ'ler ve Eğitim Kurumları için Örgü Tabanlı Mobil Eğitim Platformu (Proje no: OHM.Ç.Ü ARG. 2011/5.025)  
Type: KOSGEB Ar-Ge ve İnovasyon Programı Araştırma Projesi  
Role: Specialist  
Duration: 4 Months  
Start – End Date: 01.04.2013 / 01.08.2013
2. Tübitak CAN Projesi  
Role: Specialist  
Duration: 6 Months  
Start – End Date: 01.10.2014 / 01.04.2015

3. Tübitak CAN Projesi

Role: Specialist

Duration: 10 Months

Start – End Date: 01.02.2016 / 01.11.2016

## IX. Reviewer Duties

1. Journal of Universal Computer Science – Special Issue: Improving Social Aspects of the Software Development Process: Games, Gamification and Related Approaches
2. Çankaya University Journal of Science and Engineering
3. IET Software

## X. Publications

### I. Articles Published in the International Journals (SCI, SCI-EXPANDED, SSCI)

1. **U. Gulec**, M. Yilmaz, V. Isler, R. O'Connor and P. Clarke (2019). A 3D Virtual Environment for Training Soccer Referees, *Computer Standards & Interfaces*, 64, pp. 1-10.
2. M. Yilmaz, F.S. Tasel, **U. Gulec**, and U. Sopaoglu (2018). Towards a Process Management Life-Cycle Model for Graduation Projects in Computer Engineering, *PlosOne*, 13 (11), pp. e0208012.
3. M. Denizci Nazligul, M. Yilmaz, **U. Gulec**, A. E. Yilmaz, V. Isler, R. V. O'Connor, P. Clarke and M. A. Gozcu (2018). Interactive Three-Dimensional Virtual Environment to Reduce the Public Speaking Anxiety Levels of Novice Software Engineers, *IET Software*, 13 (2), pp. 152-158.
4. **Ulas Gulec**, Murat Yilmaz and Veysi Isler (2017). A Literature Survey: Is it Necessary to Develop a New Software Development Methodology for Virtual Reality Projects, *Journal of Universal Computer Science*, 23 (8), pp. 725-754.
5. **Ulas Gulec** and Murat Yilmaz (2016). A Serious Game for Improving the Decision Making Skills and Knowledge Levels of Turkish Football Referees according to the Laws of the Game, *SpringerPlus*, 5:622.

## **II. International Conferences**

1. **U. Gulec**, M. Yilmaz, A. D. Yalcin, R. V. O'Connor & P. M. Clarke (2019). CENGO: A Web-Based Serious Game to Increase the Programming Knowledge Levels of Computer Engineering Students, Proceedings of the 26th European and Asian Conference on Systems, Software and Services Process Improvement (EuroSPI 2019), 18-20 September 2019, Edinburgh, Scotland.
2. M. Yilmaz, S. Tasel, E. Tuzun, **U. Gulec**, R. V. O'Connor & P. M. Clarke (2019). Applying Blockchain to Improve the Integrity of the Software Development Process, Proceedings of the 26th European and Asian Conference on Systems, Software and Services Process Improvement (EuroSPI 2019), 18-20 September 2019, Edinburgh, Scotland.
3. P. M. Clarke, R. V. O'Connor, E. Meade, E. O'Keeffe, N. Lyons, D. Lynch, M. Yilmaz & **U. Gulec** (2019). The Changing Role of the Software Engineer, Proceedings of the 26th European and Asian Conference on Systems, Software and Services Process Improvement (EuroSPI 2019), 18-20 September 2019, Edinburgh, Scotland.
4. **U. Gulec**, M. Yilmaz, V. Isler, R. V. O'Connor & P. Clarke (2018). Adopting Virtual Reality as a Medium for Software Development Process Education, International Conference on Software System Process (ICSSP 2018), 26-27 May 2018, Gothenburg, Sweden.
5. M. Denizci Nazligul, M. Yilmaz, **U. Gulec**, M. A. Gozcu, R. V. O'Connor & P. Clarke (2017). Overcoming Public Speaking Anxiety of Software Engineers Using Virtual Reality Exposure Therapy, Proceedings of the 24th European and Asian Conference on Systems, Software and Services Process Improvement (EuroSPI 2017), 6-8 September 2017, Ostrava, Czech Republic.
6. Saran, M. & **Güleç, U.** (2014). Contribution of Intelligent Repeat Engine in Mobile Learning for Enhancing Students' Learning in Industrial Engineering Education, 2014 SOLSTICE eLearning & CLT Conference, Edge Hill University, Ormskirk, UK.

### III. National Conferences

1. **U. Gulec**, M. Yilmaz, C. K. Adali & V. Isler (2019). Anti-Social: Bireylerin Sosyal Medya Bağımlılığını Azaltmak Amacıyla Düşünölmüş Bir Ciddi Oyun, 2019 Ulusal Yazılım Mühendisliđi Sempozyumu (UYMS), İzmir Yüksek Teknoloji Üniversitesi, İzmir, Türkiye.
2. I. S. Isler, M. H. Doganay, M. Gokcen & **U. Gulec** (2019). 3B Modelleme ve Düzenleme Araçlarının Estetik Cerrahi Alanında Kullanılması, 2019 Ulusal Yazılım Mühendisliđi Sempozyumu (UYMS), İzmir Yüksek Teknoloji Üniversitesi, İzmir, Türkiye.
3. M. Yilmaz & **U. Gulec** (2018). Yazılım Mühendisliđi Dersi için Geliştirilmiş Ders Akış Modeli ve İlgili Alan Saha Çalışması, 2018 Ulusal Yazılım Mühendisliđi Sempozyumu (UYMS), Sabancı Üniversitesi, İstanbul, Türkiye.
4. **U. Gulec**, M. Yilmaz & V. Isler (2018). Yazılım Geliştirme Süreçlerini Eğitmek Amacıyla Tasarlanan Sanal Ofis Ortamında Ortamın Gerçekliğini Arttıran Etmenler, 2018 Ulusal Yazılım Mühendisliđi Sempozyumu (UYMS), Sabancı Üniversitesi, İstanbul, Türkiye.
5. **U. Gulec**, M. A. Gozcu, S. Dogan, N. Mesurhan, M. Yilmaz, V. Isler & M. Dinc (2018). Simulacrum: Savaş Koşullarında Acil Tıbbi Müdahale ve İlk Yardım Simölasyonu, 2018 Ulusal Yazılım Mühendisliđi Sempozyumu (UYMS), Sabancı Üniversitesi, İstanbul, Türkiye. (**Best Paper Award**)
6. M. Yilmaz, **U. Gulec**, R. V. O'Connor, P. Clarke & E. Tüzün (2017). İşe Alıştırma (Onboarding) Süreçlerinin İyileştirilmesi için Düşünölmüş Bir Endüstriyel Vaka Çalışması, 2017 Ulusal Yazılım Mühendisliđi Sempozyumu (UYMS), Alanya Hamdullah Emin Paşa Üniversitesi, Alanya, Türkiye.
7. **U. Gulec**, M. Yilmaz & M. A. Gozcu (2017). Bireylerin Programlama Yeteneklerini ve Bilgi Seviyelerini Arttırmak Amacıyla Düşünölmüş Ciddi Oyun Tabanlı Öğrenme Çatısı – CENGO, 2017 Ulusal Yazılım Mühendisliđi Sempozyumu (UYMS), Alanya Hamdullah Emin Paşa Üniversitesi, Alanya, Türkiye.
8. M. Yilmaz, S. Tasel, **U. Gulec** & U. Sopaoglu (2016). Bilgisayar Mühendisliđi Bitirme Projeleri için Düşünölmüş Bir Süreç Yönetim Modeli, 2016 Ulusal Yazılım

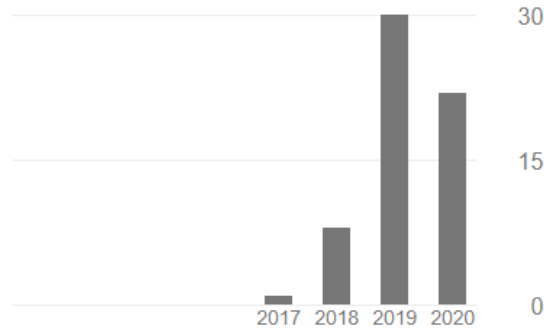
Mühendisliği Sempozyumu (UYMS), Çanakkale 18 Mart Üniversitesi, Çanakkale, Türkiye.

9. **U. Gulec**, M. Yilmaz & M. A. Gozcu (2016). Futbol Hakemlerinin Eğitimi Amacıyla Tasarlanan Futbol Simülasyonunda Maçın Dinamizmini Sağlayan Etmenler, 2016 Ulusal Yazılım Mühendisliği Sempozyumu (UYMS), Çanakkale 18 Mart Üniversitesi, Çanakkale, Türkiye.
10. **U. Gulec** & M. Yilmaz (2015). Futbol Hakemlerinin Karar Verme Yeteneklerini Geliştirmek İçin Düşünölmüş Ciddi Oyun Tabanlı Öğrenme Çatısı, 2015 Ulusal Yazılım Mühendisliği Sempozyumu (UYMS), Yaşar Üniversitesi, İzmir, Türkiye.

## XI. Citations

Alıntı yapanlar

	Hepsi	2015 yılından bugüne
Alıntılar	63	62
h-endeksi	5	5
i10-endeksi	2	2



## XII. Conference Organization and Activities

1. Global Game Jam, 31 January – 02 February 2020, Gaziantep, Organizing Committee
2. UYMS 2019- Session Chair
3. Ramazan Game Jam, 24 – 26 May 2019, Gaziantep, Organizing Committee
4. UYMS 2019 – Program ve Organizing Committee



5. Eurasia Graphics 2018 – Organizing ve Publication Committee
6. 3. Virtual Reality & Augmented Reality & Serious Games Workshop, Çankaya University, 05 May 2018, Ankara – Organizing Committee
7. First Lego League, 17 – 18 February 2018, Ankara – Robotic Jury Member
8. International Workshop on Mathematical Methods in Engineering (MME) 2017 – Local Organizing Committee (Program and Organization Coordinator)

### **XIII. Awards**

1. Tüsiad SD2 Ulusal Rekabetçilik Ödülü, December 2019, Simovate AR
2. Ulusal Yazılım Mühendisliği Sempozyumu 2018, Software Engineering for Healthcare – Best Paper Award - Simulacrum: Savaş Koşullarında Acil Tıbbi Müdahale ve İlk Yardım Simülasyonu
3. High Honour Student – 2012, Çankaya University

### **XIV. Thesis Jury Membership**

1. Ozan Emirhan BAYYURT, “Designing and Implementing a Game Development Framework for Interactive Stories and Role Playing Games”, 06.09.2019, Middle East Technical University, Graduate School of Informatics, Master Thesis.
2. Müge DEĞİRMENCİ, “Synthesis of Realistic 3D Artifacts using Flow Fields”, 06.09.2019, Middle East Technical University, Graduate School of Informatics, Master Thesis.
3. Muhammed Nesib TEKİN, “Selection of the Software Development Process Metrics Tool on Scrum Software Development: An Analytic Hierarchy Process Approach”, 13.06.2019, Çankaya University Computer Engineering Department Master Thesis.