

CURRICULUM VITAE

Name and Surname: Güray Yılmaz
Academic Title: Professor Dr.
Work Address:
Email: gurayy@biruni.edu.tr
Foreign Languages Known (Score and Year): English, C1 Advanced, 2017
Area of Expertise: Engineering and Technology

Degree	Department/Program	University	Year
Doctorate	BİLGİSAYAR MÜHENDİSLİĞİ BÖLÜMÜ	Istanbul Technical University	2002
Master's Degree	BİLGİSAYAR MÜHENDİSLİĞİ BÖLÜMÜ	Istanbul Technical University	1995
Bachelor's Degree	BİLGİSAYAR MÜHENDİSLİĞİ BÖLÜMÜ	Istanbul Technical University	1991

Master's Thesis Title (abstract attached) and Thesis Supervisor(s):

Dağıtılmış veritabanı sistemlerinde eşzamanlılık kontrolü

Doctoral Thesis/Proficiency Study/Medical Specialization Thesis Title (abstract attached) and Supervisor(s):

Dağıtılmış nesneye dayalı sistemler için dağıtılmış bileşik nesne modeli

Position Title	Workplace	Year
Professor Dr.	Biruni University	2023-Continues
Professor Dr.	İstanbul Arel University	2021-2023
Associate Professor	İstanbul Esenyurt University	2020-2021
Associate Professor	İstanbul Kültür University	2014-2017
Associate Professor	Air Force Academy Command	2014-2017
Assistant Professor	Air Force Academy Command	2005-2014
Assistant Professor	İstanbul Kültür University	2005-2014
Lecturer	Air Force Academy Command	2002-2005
Lecturer	Air Force Academy Command	1995-2002
Research Assistant	Air Force Academy Command	1991-1995

Supervised Master's Theses:

1. Büyük veri analizi yöntemleri ve yazılım teknolojileriyle metin madenciliği (2016)
2. Kısıtlı kaynak kullanılarak düşük maliyetli siber tuzak sistemi kurulması ve yönetilmesi (2016)
3. Çoklu insansız hava araçlarının görev planlamalarının ve sürdürülebilirliğinin cuda mimarisi kullanılarak genetik

algoritma ile gereklenmesi (2016)

4. İnsansız hava araçlarında arazi verilerine dayalı uu yönü sınırlamasız konumlandırma sistemi benzetim alışması (2013)

5. Arazi Verisine Dayalı Konumlandırma ve Seyrüsefer Sistemi Tasarlanması (2012)

6. Farklı Ağ Alanları Arası Güvenli Veri Deęiřimi (2012)

7. Hareketli Geici Ağlarda Daęıtılmış İřbirlięi ve Güven Esasına Dayalı Saldırı Tespit Sistemleri (2011)

8. Klinik Rehberlerin Uzman Sistemlere Dönüřtürülmesi (2010)

9. Karar Destek Sistemlerinin Kullanımı İçin Uygun Bir Model Geliřtirilmesi (2009)

10. An Architectural Model for Content Management in E-Commerce Applications Using Intelligent Agents (2008)

Supervised Doctoral Theses/Proficiency Studies in Arts:

1. oklu otonom insansız hava araçları için paralel programlama tabanlı yol planlaması (2015)

Roles in Projects:

1. 112E281 no lu TÜBİTAK 1001 AR GE projesi Grup Halindeki Kooperatif İnsansız Hava Araçları için Grafik İşlemcilerin Genel Amaçlı Programlanması Tabanlı arpışma Önleme ve Fiziki Engellerden Sakınma Sistemi Tasarımı ve Geliřtirilmesi, TUBITAK Project, Yılmaz G. (Executive), 2013-2015.

Administrative Duties:

1. Head of Department - Biruni University (2023 - Continues)

2. Head of Department - İstanbul Esenyurt University (2022 - 2022)

3. Head of Department - İstanbul Rumeli University (2021 - 2021)

4. Head of Department - Air Force Academy Command (2007 - 2017)

5. Head of Main Science/Science Department - Air Force Academy Command (2002 - 2007)

PUBLICATIONS

A. Articles published in international peer-reviewed journals:

A1. etin Ö., Yılmaz G., "Real-time Autonomous UAV Formation Flight with Collision and Obstacle Avoidance in Unknown Environment", *JOURNAL OF INTELLIGENT AND ROBOTIC SYSTEMS*, vol. 84, pp. 415-433, 2016.

A2. Eroęlu O., Yılmaz G., "A terrain referenced UAV localization algorithm using Binary search method", *JOURNAL OF INTELLIGENT AND ROBOTIC SYSTEMS*, vol. 73, pp. 309-323, 2014.

A3. etin Ö., Yılmaz G., "Sigmoid limiting functions and potential field based autonomous air refueling path planning for UAVs", *JOURNAL OF INTELLIGENT AND ROBOTIC SYSTEMS*, vol. 73, pp. 797-810, 2014.

A4. Yięit H., Yılmaz G., "Development of a GPU accelerated terrain referenced UAV localization and navigation algorithm", *JOURNAL OF INTELLIGENT AND ROBOTIC SYSTEMS*, vol. 70, pp. 477-489, 2013.

A5. Zaęlı İ., etin Ö., Yılmaz G., "Establishing obstacle and collision free communication relay for UAVs with artificial potential fields", *JOURNAL OF INTELLIGENT AND ROBOTIC SYSTEMS*, vol. 69, pp. 361-372, 2013.

A6. Yılmaz G., Erdoęan T. N., "DCOBE: Distributed composite object-based environment", *THE COMPUTER JOURNAL*, vol. 48, no. 3, pp. 273-292, 2005.

A7. Yılmaz G., Erdoęan T. N., "Integrating Distributed Composite Objects into Java Environment", *LECTURE NOTES IN COMPUTER SCIENCES*, vol. 3261, pp. 322-331, 2005.

B. Papers presented at international scientific meetings and published in proceedings:

B1. akır M., Yılmaz G., oklu İnsansız Hava Araçlarının Görev Planlamalarının ve Sürdürülebilirlięinin CUDA Mimarisi Kullanılarak Gereklenmesi (Mission Planning and Sustainability for Multiple Unmanned Aerial Vehicles Implementation of Using Genetic Algorithm with CUDA Architecture), In: *International Conference on Computer Science and Engineering*, Tekirdaę, Turkey, 2016, pp. 493-500.

B2. Gül M., Yılmaz G., Location Search in UAV Video Using Telemetry Data, In: *1st. International Conference on Computer Science and Engineering, Tekirdaę, 20-23 October 2016.*, Tekirdaę, Turkey, 2016, pp. 758-762.

- B3.** Çakır M., Yılmaz G., Route Planning for Multiple Unmanned Aerial Vehicles (UAVs) with Parallel Genetic Algorithm on GPU Using CUDA, In: *International Conference on Advanced Technology & Science (ICAT'16)*, Konya, Turkey, 2016.
- B4.** Pala E., Yılmaz G., Effects of Spectral Clustering on Document Categorization Using Distributed Tools, In: *International Conference on Advanced Technology & Science (ICAT'16), Konya, Turkey, 1-3 September 2016*, Konya, Turkey, 2016.
- B5.** Çakmak B., Yılmaz G., Developing Test Infrastructure for Distributed Cost Effective Network Security System Using Limited Resources, In: *International Conference on Advanced Technology & Science (ICAT'16)*, Konya, Turkey, 2016.
- B6.** Eroğlu O., Sayar Z. A., Yılmaz G., An Optimization Approach for Airport Ground Operations with A Shortest Path Algorithm, In: *International Conference on Air Transport (INAIR'15)*, Amsterdam, Netherlands, 2015.
- B7.** Lokman G., Yılmaz G., Hyperspectral Image Classification Using Support Vector Neural Network Algorithm, In: *7th International Conference on recent Advances in Space Technologies (RAST 2015)*, İstanbul, Turkey, 2015, pp. 239-243.
- B8.** Akar S. B., Yılmaz G., Etmen Tabanlı Uçuş Eğitimi Uygulaması, In: *The International Educational Technology Conference (IETC 2015)*, İstanbul, Turkey, 2015, pp. 432-441.
- B9.** Lokman G., Yılmaz G., A New Method for Anomaly Detection and Target Recognition, In: *7th. International Conference on Unmanned Aircraft Systems (ICUAS'14)*, Orlando, United States, 2014, pp. 577-583.
- B10.** Çetin Ö., Yılmaz G., GPGPU Accelerated Real-Time Potential Field Based Formation Control for Unmanned Aerial Vehicles, In: *International Conference on Unmanned Aircraft Systems (ICUAS'14)*, Orlando, United States, 2014, pp. 103-114.
- B11.** Erdem H. A., Yılmaz G., Collaborative Learning for Medical Students Using Distributed Virtual Environments, In: *5th International Future-Learning Conference on Innovations in Learning for the Future 2014: e-Learning, 5-7 May 2014*, İstanbul, Turkey, 2014.
- B12.** Yıldız Z., Yılmaz G., Effects of Fuzzy Logic Methods on Distributed System Load Balancing Applications, In: *4th. World Conference on Innovation and Computer Sciences (INSODE'14)*, Roma, Italy, 2014.
- B13.** Yıldız Z., Aydın M., Yılmaz G., Parallelization of Bitonic Sort and Radix Sort Algorithms on Many Core GPUs, In: *IEEE 10th International Conference on Electronics, Computer and Computation, (ICECCO 2013)*, Ankara, Turkey, 2013, pp. 330-333.
- B14.** Tepe A., Yılmaz G., A Survey on Cloud Computing Technology and Its Application to Satellite Ground Systems, In: *IEEE 6th International Conference on recent Advances in Space Technologies (RAST 2013)*, İstanbul, Turkey, 2013, pp. 477-481.
- B15.** Eroğlu O., Yılmaz G., A novel fast and accurate algorithm for Terrain Referenced UAV localization, In: *IEEE 6th. International Conference on Unmanned Aircraft Systems (ICUAS'13)*, Atlanta, United States, 2013, pp. 660-667.
- B16.** Çetin Ö., Yılmaz G., GPGPU Accelerated Potential Field Based Autonomous Air Refueling Approach for UAVs, In: *International Conference on Unmanned Aircraft Systems (ICUAS'13)*, Atlanta, United States, 2013, pp. 269-277.
- B17.** Zağlı İ., Yılmaz G., Sönmez A. C., A Novel Approach on Routing Protocol Defense in Ad-hoc Networks, In: *IEEE International Conference on Technological Advances in Electrical, Electronics and Computer Engineering (TAECE'13)*, Konya, Turkey, 2013, pp. 46-51.
- B18.** Zağlı İ., Yılmaz G., Sönmez A. C., Routing Misbehavior prevention in AODV, In: *3rd. World Conference on Innovation and Computer Sciences (INSODE'13)*, Antalya, Turkey, 2013, pp. 356-367.
- B19.** Yiğit H., Yılmaz G., Development of a GPU Accelerated UAV Localization and Navigation Algorithm Using Digital Terrain Map Data, In: *5th. International Conference on Unmanned Aircraft Systems (ICUAS'12)*, Philadelphia, United States, 2012.
- B20.** Zağlı İ., Çetin Ö., Yılmaz G., Obstacle Free Airborne Communication Relay Approach by Using Autonomous Unmanned Aerial Vehicles, In: *International Conference on Unmanned Aircraft Systems (ICUAS'12)*, Philadelphia, United States, 2012.
- B21.** Ayşan A. İ., Yılmaz G., Server Based Encryption (SERBASEN) Protocol on Air Gap Network, In: *5th. International Conference on Information Security & Cryptology (ISC'12)*, Ankara, Turkey, 2012, pp. 314-317.
- B22.** Nakhchivanski J., Yılmaz G., Erdoğan T. N., Logistics Application on Distributed Composite Object Based Environment, In: *4th. International Conference on Computer and Electrical Engineering (ICCEE 2011)*, Singapur, Singapore, 2011, pp. 153-157.
- B23.** Akbulut A., Akbulut F., Zaim A. H., Yılmaz G., Wireless Sensor Networks for Space and Solar System Missions, In: *International Conference on recent Advances in Space Technologies (RAST 2011)*, İstanbul, Turkey, 2011, pp. 616-618.
- B24.** Akbulut A., Parmaksızoğlu C., Zaim A. H., Yılmaz G., Energy and Distance Factor Based Routing Protocol for Wireless Sensor Networks Using Mobile Agents, In: *IEEE 5th International Conference on recent Advances in Space Technologies (RAST 2011)*, İstanbul, Turkey, 2011, pp. 399-402.
- B25.** Ayşan A. İ., Yiğit H., Yılmaz G., GIS Applications in Cloud Computing Platform and Recent Advances, In: *IEEE 5th International Conference on recent Advances in Space Technologies (RAST 2011)*, İstanbul, Turkey, 2011, pp. 193-196.
- B26.** Mutlu S., Yılmaz G., A Distributed Cooperative Trust Based Intrusion Detection Framework for MANETs, In: *7th International Conference on Networking and Services (ICNS 2011)*, Venedik, Italy, 2011, pp. 292-298.
- B27.** Akbulut A., Yılmaz G., Automated Scheduling Of University Exams, In: *2nd International Conference on Information and Multimedia Technology*, HongKong, China, 2010, pp. 269-273.
- B28.** Koç S., Yılmaz G., Kabak Y., The Usage of Clinical Guidelines in Medical Education, In: *3rd International Future Learning Conference on Innovations in Learning for the Future 2010*, İstanbul, Turkey, 2010, pp. 311-320.
- B29.** Koç S., Yılmaz G., Kabak Y., The Clinical Guidelines Usage Towards The Diagnosis and Treatment of H1N1, In: *5th International Symposium on Health Informatics and Bioinformatics*, Antalya, Turkey, 2010.

- B30.** Gelmez B., Sancar M., Akbulut A., Yılmaz G., An Autonomous Decision Support System Prototype For Supply Management In E-Commerce Systems, In: *IADIS e-Commerce 2008 Conference*, Amsterdam, Netherlands, 2008, pp. 326-328.
- B31.** Akbulut A., Yılmaz G., An Architectural Model for Content Management in E-Commerce Applications", In: *IADIS e-Commerce 2007 Conference*, Porto, Portugal, 2007, pp. 260-264.
- B32.** Yılmaz G., Erdoğan T. N., A New Distributed Composite Model for Collaborative Computing, In: *16th International Symposium on Computer and Information Sciences (ISCIS XVI)*, Antalya, Turkey, 2001, pp. 80-86.
- B33.** Yılmaz G., Erdoğan T. N., Partitioned Object Models for Distributed Systems, In: *IATED Int. Conf. on Applied Informatics (AI'2000)*, Innsbruck, Austria, 2000, pp. 714-717.
- B34.** Yılmaz G., Erdoğan T. N., Partitioned Object Models for Distributed Abstractions, In: *14th International Symposium on Computer and Information Sciences (ISCIS XIV)*, Aydın, Turkey, 1999, pp. 1072-1074.
- B35.** Yılmaz G., Şen V., Pınar M., Deadlock-Free Wormhole Routing Algorithms for Multiprocessor Systems, In: *12th International Symposium on Computer and Information Sciences (ISCIS XII)*, 27-29 October 1997, Antalya-Türkiye, pp. 446-453., Antalya, Turkey, 1997, pp. 446-453.

C. National/international books written or chapters in books:

C2. Chapters in national/international books written:

- C2.1.** Yılmaz G., Şahingöz Ö. K., "GPU-Accelerated Flight Route Planning for Multi-UAV Systems Using Simulated Annealing", *Lecture Notes in Computer Science: Artificial Intelligence: Methodology, Systems, and Applications*, Springer Verlag, Berlin, 2016.
- C2.2.** Yılmaz G., Erdoğan T. N., "Integrating Distributed Composite Objects into Java Environment", *Lecture Notes in Computer Science: Advances in Information Systems*, Springer Verlag, Berlin, 2005.
- C2.3.** Yılmaz G., Erdoğan T. N., "Distributed Composite Objects: A New Object Model for Cooperative Applications", *Lecture Notes in Computer Science: Scientific Engineering of Distributed Java Applications*, Springer Verlag, Berlin, 2004.

D. Articles published in national peer-reviewed journals:

- D1.** Mutlu S., Yılmaz G., "Simulation and Performance Analysis of Distributed Cooperative Trust Based Intrusion Detection Framework for MANETs", *Journal of Aeronautics and Space Technologies*, vol. 6, no. 2, pp. 49-57, 2013.
- D2.** Eker G., Yılmaz G., "Kablosuz Algılayıcı Ağlar Kullanılarak Belirlenen Bir Bölgenin Çevre Güvenliğinin Sağlanması", *Türkiye Bilişim Vakfı Bilgisayar Bilimleri ve Mühendisliği Dergisi*, vol. 6, no. 1, pp. 43-49, 2013.
- D3.** Akbulut A., Yılmaz G., "University Exam Scheduling System Using Graph Coloring Algorithm and RFID Technology", *International Journal of Innovation, Management and Technology*, vol. 4, no. 1, pp. 66-72, 2013.
- D4.** Çetin Ö., Yılmaz G., "İnsansız Hava Araçları İçin Otonom İniş Sistemi Simülatorü Tasarımı", *Bilişim Teknolojileri Dergisi*, vol. 5, no. 2, pp. 1-7, 2012.
- D5.** Arslan V., Yılmaz G., "Karar Destek Sistemlerinin Kullanımı İçin Uygun Bir Model Geliştirme", *Havacılık ve Uzay Teknolojileri Dergisi*, vol. 4, no. 4, pp. 75-82, 2010.
- D6.** Arslan V., Yılmaz G., "Karar Destek Amaçlı Bir Raporlama Aracı", *Bilişim Teknolojileri Dergisi*, vol. 3, no. 1, pp. 11-16, 2010.

E. Papers presented at national scientific meetings and published in proceedings:

- E1.** Yılmaz G., Mühendislik Eğitimlerinin İçerik ve Kalitesinin Artırılmasına Yönelik Bir Model Önerisi, In: *1. Rumeli Mühendislik ve Mimarlık Eğitimi Sempozyumu*, İstanbul, Turkey, 2021, pp. 53-59.
- E2.** Çakır M., Yılmaz G., Gezin Satıcı Probleminin Paralel Genetik Algoritma İle Optimizasyonu (Traveling Salesman Problem Optimization with Parallel Genetic Algorithm), In: *23. IEEE Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SİU'15)*, Malatya, Turkey, 2015, pp. 2452-2455.
- E3.** Lokman G., Yılmaz G., Destek Vektör Sinir Ağları Algoritması ile Hiperspektral Görüntülerde Hedef Bulma (Target Detection in Hyperspectral Images Using Support Vector Neural Networks Algorithm), In: *23. IEEE Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SİU'15)*, Malatya, Turkey, 2015, pp. 1323-1326.
- E4.** Çakmak B., Yılmaz G., Honeypot ve Hadoop Tabanlı Bilgi Güvenliği Yönetim Sistemi, In: *17. Akademik Bilişim Konferansı (AB2015)*, Eskişehir, Turkey, 2015.
- E5.** Turguner C., Yılmaz G., HAVACILIK SEKTÖRÜNDE KULLANILAN MOBİL UYGULAMALARIN GÜVENLİĞİ VE MOBİL ARAKATMAN YAKLAŞIMI, In: *3. Havacılıkta İleri Teknolojiler Konferansı (HİTEK 2014)*, İstanbul, Turkey, 2014.
- E6.** Can O., Yılmaz G., HAVACILIKTA BULUT HESAPLAMA KULLANIMI VE BULUT ORTAMINDA SİBER SALDIRILARIN TESPİT EDİLMESİ, In: *3. Havacılıkta İleri Teknolojiler Konferansı (HİTEK 2014)*, İstanbul, Turkey, 2014.
- E7.** Çetin Ö., Yılmaz G., İnsanlı-İnsansız Hava Aracı Formasyonunda YPA Tabanlı Otonom Platform Kontrolü, In: *3. Havacılıkta İleri Teknolojiler Konferansı (HİTEK 2014)*, İstanbul, Turkey, 2014.
- E8.** Lokman G., Yılmaz G., Hiperspektral Görüntüler İle Olağan Dışı Durum Ve Hedef Tespiti (Anomaly Detection and Target Recognition With Hyperspectral Images), In: *22. IEEE Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SİU'14)*, Trabzon, Turkey,

2014.

- E9.** Özalp N., Yılmaz G., Ayan U., SÜREKLİ AKAN VERİLERDE AYKIRILIK TABANLI YENİ YORUM FİLTRELEME YAKLAŞIMI (NOVEL COMMENT FILTERING APPROACH BASED ON OUTLIER ON STREAMING DATA), In: 20. *IEEE Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SİU'12)*, Muğla, Turkey, 2012.
- E10.** Zağlı İ., Yılmaz G., Sönmez A. C., Kablosuz Geçici Ağlarda Yönlendirme Saldırılarının Analizi ve Önlenmesi, In: 4. *Ağ ve Bilgi Güvenliği Sempozyumu (ABGS'12)*, Ankara, Turkey, 2011, pp. 70-78.
- E11.** Nakhchivanski J., Yılmaz G., Erdoğan T. N., Dağıtılmış Bileşik Nesne Tabanlı Ortam Üzerinde Lojistik Uygulaması (Logistics Application on Distributed Composite Object Based Environment), In: 2. *Yazılım Kalitesi ve Yazılım Geliştirme Araçları Sempozyumu (YKGS'10)*, İstanbul, Turkey, 2010.
- E12.** Akbulut A., Yılmaz G., Ajan Tabanlı e-Ticaret Sitelerinde İçerik Yönetimi, In: 3. *İstanbul Bilişim Kongresi*, İstanbul, Turkey, 2009.
- E13.** Yılmaz G., Erdoğan T. N., Dağıtılmış Sistemler İçin Yeni Bir Nesne Modeli, In: *Yüksek Performanslı Bilişim Sempozyumu*, Kocaeli, Turkey, 2002.
- E14.** Yılmaz G., Erdoğan T. N., İnternet Ortamında Ortaklaşa İş Yürütmeyi Destekleyen Yeni Bir Nesne Modeli ve Programlama Arayüzü, In: 1. *Ulusal İletişim Teknolojileri Sempozyumu*, Ankara, Turkey, 2001, pp. 256-261.
- E15.** Yılmaz G., Erdoğan T. N., Bileşik Nesne Modeli ve Dağıtılmış Ortamlar İçin Bir Sistem Desteği, In: *Elektrik-Elektronik-Bilgisayar Mühendisliği 9. Ulusal Kongresi*, Kocaeli, Turkey, 2001.
- E16.** Yılmaz G., Erdoğan T. N., Geniş Alanlı Ağlar İçin Bir Dağıtılmış Kopyalı Nesne Modeli, In: 8. *IEEE Sinyal İşleme ve Uygulamaları Kurultayı (SİU'2000)*, Antalya, Turkey, 2000, pp. 250-255.
- E17.** Yılmaz G., Turnadereli İ., Kurnaz S., Yenilmez L., Dağıtılmış Nesne Modelleri, In: 8. *IEEE Sinyal İşleme ve Uygulamaları Kurultayı (SİU'2000)*, Antalya, Turkey, 2000.
- E18.** Kargın S., Yılmaz G., Aydemir M. E., Bistatik Yapay Açıklıklı Radar Yardımıyla Görüntülemeye Ters Dönüşüm Bağlantısı, In: 5. *IEEE Sinyal İşleme ve Uygulamaları Kurultayı (SİU'97)*, Aydın, Turkey, 1997, pp. 497-502.