

## Assoc. Prof. GÜLFEM ALPTEKİN

### Personal Information

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### International Researcher IDs

ScholarID: QsiWkyMAAAAJ

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### Education Information

Doctorate, Bogazici University, Institute Of Science, Bilgisayar Mühendisliği (Dr), Turkey 2003 - 2010

Postgraduate, Galatasaray University, Fen Bilimleri Enstitüsü, Endüstri Mühendisliği (YI) (Tezli), Turkey 2001 - 2003

Undergraduate, Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Bilgisayar Mühendisliği Bölümü, Turkey 1997 - 2001

### Foreign Languages

French, C1 Advanced

English, C1 Advanced

### Dissertations

Doctorate, Alternative spectrum trading architectures in cognitive radio networks: Spectrum exchange, CRM, strict power control, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği (Dr), 2010

Postgraduate, L'evaluation des alternatives de paiement electronique avec des methodes floues d'aide a la decisions, Galatasaray Üniversitesi, Fen Bilimleri Enstitüsü, Endüstri Mühendisliği (YI) (Tezli), 2003

### Research Areas

algorithms, Performance Modelling and Evaluation, Numerical Algorithms, Uncertainty Management, Software, Software Engineering, Soft Computing, Optimization Theory and Methods, Linear Programming, Heuristic Methods

### Academic Titles / Tasks

Associate Professor, Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Bilgisayar Mühendisliği Bölümü, 2017 - Continues

Assistant Professor, Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Bilgisayar Mühendisliği Bölümü, 2010 - 2017

Research Assistant, Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Bilgisayar Mühendisliği Bölümü, 2001 - 2010

## Academic and Administrative Experience

Galatasaray Üniversitesi, Mühendislik ve Teknoloji Fakültesi, Bilgisayar Mühendisliği Bölümü, 2015 - Continues

Galatasaray Üniversitesi, Rektörlük, Yabancı Diller Bölümü, 2010 - 2015

## Advising Theses

ALPTEKİN G., Award determination for crowdsourced software development, Postgraduate, A.SARI(Student), 2017

ALPTEKİN G., A code offloading framework for mobile cloud computing: IceMobile, Postgraduate, E.ÇALIŞIR(Student), 2016

ALPTEKİN G., Screen positioning algorithm for augmented reality application on android devices, Postgraduate, D.ERİŞİK(Student), 2016

ALPTEKİN G., Energy efficiency analysis of a GPS-based augmented reality application, Postgraduate, A.KARAMAN(Student), 2016

ALPTEKİN G., Analysis of the impact of clustering on Apriori data mining algorithm, Postgraduate, N.YILMAZ(Student), 2013

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

- I. **A Comprehensive Framework for Measuring the Immediate Impact of TV Advertisements: TV-Impact**  
Arslan A., Tecimer K., Turgut H., Bali Ö., Yücel A., ALPTEKİN G., ORMAN G. K.  
Entropy, vol.26, no.2, 2024 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Using Multi-Criteria Decision-Making for Smart City Evaluation and Ranking**  
ÜNAL M., ALPTEKİN G. I.  
Kent Akademisi (Online), vol.16, no.4, pp.2538-2552, 2023 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Review of Sustainable Smart City Assessment Models' KPIs**  
Akburak D., GÜRBÜZ T., ALPTEKİN G.  
9th IEEE International Smart Cities Conference, ISC2 2023, Bucharest, Romania, 24 - 27 September 2023
- II. **Evaluation of the Digitalization Efficiency of Countries Using Data Envelopment Analysis**  
Keles E., Alptekin G. I.  
2023 Smart Cities Symposium Prague, SCSP 2023, Prague, Czech Republic, 25 - 26 May 2023
- III. **Human Activity Recognition with Smart Watches Using Federated Learning**  
Gönül T., Durmaz Incel Ö., Alptekin G.  
International Conference on Intelligent and Fuzzy Systems 2022, İzmir, Turkey, 19 - 21 July 2022, vol.505, pp.77-85
- IV. **Financial Applications of Graph Neural Networks: A Review**  
Alptekin G.  
International Conference of Technology Analysis, Fintech and Financial Services (TAFFS 2022), Kolkata, India, 11 - 13 March 2022, pp.1-4
- V. **Transforming Deep Learning Models for Resource-Efficient Activity Recognition on Mobile Devices**  
Bursa S. O., Incel O. D., Alptekin G.  
5th Conference on Cloud and Internet of Things, CIoT 2022, Marrakech, Morocco, 28 - 30 March 2022, pp.83-89
- VI. **DAKOTA: Continuous authentication with behavioral biometrics in a mobile banking application**

Barlas Y., Basar O. E., Akan Y., Isbilen M., Alptekin G. I., Incel O. D.

5th International Conference on Computer Science and Engineering, UBMK 2020, Diyarbakır, Turkey, 9 - 10 September 2020, pp.298-303

**VII. Resource usage analysis of a mobile banking application using sensor-and-touchscreen-based continuous authentication**

Basar O. E., ALPTEKİN G., Volaka H. C., Isbilen M., Incel O. D.

16th International Conference on Mobile Systems and Pervasive Computing, MobiSPC 2019, 14th International Conference on Future Networks and Communications, FNC 2019, 9th International Conference on Sustainable Energy Information Technology, SEIT 2019, Halifax, Canada, 19 - 21 August 2019, vol.155, pp.185-192

**VIII. Using behavioral biometric sensors of mobile phones for user authentication**

Karakaya N., Alptekin G., İncel Ö. D.

23rd International Conference on Knowledge-Based and Intelligent Information & Engineering Systems, KES 2019, Budapest, Hungary, 4 - 06 September 2019, vol.159, pp.475-484

**IX. Towards continuous authentication on mobile phones using deep learning models**

Volaka H. C., Alptekin G., Basar O. E., Isbilen M., Incel O. D.

16th International Conference on Mobile Systems and Pervasive Computing, MobiSPC 2019, 14th International Conference on Future Networks and Communications, FNC 2019, 9th International Conference on Sustainable Energy Information Technology, SEIT 2019, Halifax, Canada, 19 - 21 August 2019, vol.155, pp.177-184

**X. A framework for customer-oriented IoT product design**

ALPTEKİN S. E., ALPTEKİN G.

2nd European Conference on Electrical Engineering Computer Science, Bern, Switzerland, 20 - 22 December 2018, pp.1-6

**XI. Software greenability: A case study of cloud-based business applications provisioning**

Acar H., Benfenatki H., Gelas J., Da Silva C. F., ALPTEKİN G., Benharkat A., Ghodous P.

11th IEEE International Conference on Cloud Computing (CLOUD) Part of the IEEE World Congress on Services, San-Francisco, Costa Rica, 2 - 07 July 2018, pp.875-878

**XII. A Data Pricing Framework for Internet of Things Solutions**

ALPTEKİN S. E., ALPTEKİN G.

21st Conference of the International Federation of Operational Research Societies, Quebec City, Canada, 17 - 21 July 2017

**XIII. Resource Usage Analysis of a Sensor-Based Mobile Augmented Reality Application**

Karaman A., Erisik D., DURMAZ İNCEL Ö., Alptekin G. I.

7th International Conference on Ambient Systems, Networks and Technologies (ANT) / 6th International Conference on Sustainable Energy Information Technology (SEIT), Madrid, Spain, 23 - 26 May 2016, vol.83, pp.300-304

**XIV. Beyond CPU: Considering Memory Power Consumption of Software**

Acar H., ALPTEKİN G., Gelas J., Ghodous P.

5th International Conference on Smart Cities and Green ICT Systems (SMARTGREENS), Rome, Italy, 23 - 25 April 2016, pp.417-424

**XV. A Resource Trading Framework for Cloudlets**

Alptekin G. I.

World Congress on Engineering and Computer Science, San-Francisco, Costa Rica, 21 - 23 October 2015, pp.743-747

**XVI. Towards a Green and Sustainable Software**

Acar H., ALPTEKİN G., Gelas J., Ghodous P.

22nd ISPE-Inc International Conference on Concurrent Engineering, Delft, Netherlands, 20 - 23 July 2015, vol.2, pp.471-480

**XVII. DESIGN OF SENSOR-BASED AUGMENTED REALITY SOFTWARE (SARAS)**

Erisik D., Karaman A., Alptekin G. I., DURMAZ İNCEL Ö., Burcak O., Isbilen M.

23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.2218-2221

- XVIII. **The Effect of Clustering in the Apriori Data Mining Algorithm: A Case Study**  
Yilmaz N., Alptekin G. I.  
World Congress on Engineering (WCE 2013), London, Canada, 3 - 05 July 2013, pp.1611-1612
- XIX. **A Spectrum Trading Model with Strict Transmission Power Control**  
Alptekin G. I., Bener A. B.  
IEEE Global Telecommunications Conference (GLOBECOM 2010), Florida, United States Of America, 6 - 10 December 2010
- XX. **An integrated approach for defining pricing strategies in competitive markets**  
Alptekin G. I., ALPTEKİN S. E.  
International Conference on Information, Process and Knowledge Management, Cancun, Mexico, 1 - 06 February 2009, pp.54-55
- XXI. **Product improvement by selecting appropriate suppliers: A case study**  
ALPTEKİN S. E., Alptekin G. I.  
International Conference on Information, Process and Knowledge Management, Cancun, Mexico, 1 - 06 February 2009, pp.129-130
- XXII. **An Integrated Evaluation Approach to Technological Innovation Risk Management**  
BÜYÜKÖZKAN FEYZİOĞLU G., FEYZİOĞLU O., ALPTEKİN G.  
1st International Conference on Risk Analysis and Crisis Response, Shanghai, China, 25 - 26 September 2007, pp.138-143

## Supported Projects

- ALPTEKİN G., Project Supported by Higher Education Institutions, KİTLE KAYNAK YAZILIM GELİŞTİRMEDE EFOR TAHMİNİ VE KİTLE SEÇİM YAKLAŞIMLARI, 2017 - 2019
- ALPTEKİN G., Project Supported by Higher Education Institutions, YENİ NESİL YAZILIM GELİŞTİRME YAKLAŞIMLARININ ANALİZİ VE YÖNETİMİ, 2016 - 2017
- ALPTEKİN G., Project Supported by Higher Education Institutions, YAZILIM GELİŞTİRME SÜRECİNDE İYİLEŞTİRMELER, 2015 - 2017
- ALPTEKİN G., Project Supported by Higher Education Institutions, ALGILAYICI ESASLI ARTTIRILMIŞ GERÇEKLİK UYGULAMASI YAZILIMI, 2015 - 2017
- ALPTEKİN G., Project Supported by Higher Education Institutions, İLETİŞİM TEKNOLOJİLERİ VE YAZILIMDA ENERJİ VERİMLİLİĞİ, 2013 - 2016
- ALPTEKİN G., Project Supported by Higher Education Institutions, PAZARLAMA VE FİYATLAMA PROBLEMLERİNDE VERİ MADENCİLİĞİ UYGULAMALARI, 2012 - 2013
- ALPTEKİN G., Project Supported by Higher Education Institutions, ELEKTRONİK YAYINCILIK PAZARI İÇİN STRATEJİK ANALİZ MODELİ, 2011 - 2012
- ALPTEKİN G., Project Supported by Higher Education Institutions, GÜÇ YÖNETİMİNİN SPEKTRUM TİCARETİNE ETKİLERİ, 2010 - 2012

## Metrics

- Publication: 37  
Citation (WoS): 481  
Citation (Scopus): 637  
H-Index (WoS): 7  
H-Index (Scopus): 8