



**YARD. DOÇ. DR. AYŞEGÜL TÜYSÜZ ERMAN**  
**Işık Üniversitesi**  
**Bilgisayar Mühendisliği**  
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- Adı Soyadı** : Ayşegül Tüysüz Erman
- Doğum Tarihi** : 17.06.1980
- Unvanı** : Yard. Doç. Dr.
- Öğrenim Durumu:**

Derece	Alan	Üniversite	Yıl
Lisans	Bilgisayar Mühendisliği	Yeditepe Üniversitesi	2004
Y. Lisans	Bilgisayar Mühendisliği	Boğaziçi Üniversitesi	2006
Doktora	Bilgisayar Bilimleri	University of Twente	2011

#### 5. Akademik Unvanlar:

Unvan	Ana Bilim Dalı	Üniversite	Yıl
Yardımcı Doçent	Bilgisayar Bilimleri ve Mühendisliği	Işık Üniversitesi	2012
Doçent			-
Profesör			-

#### 6. Yönetilen Yüksek Lisans ve Doktora Tezleri

##### 6.1. Yüksek Lisans Tezleri

- Thijs Mutter**, "Partition-based Network Load Balanced Routing in Large Scale Multi-sink Wireless Sensor Networks," MS Thesis, University of Twente, 2009

##### 6.2. Doktora Tezleri

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## 7. Yayınlar

### 7.1. Uluslararası hakemli dergilerde yayınlanan makaleler (SCI & SSCI & Arts and Humanities)

1. Tüysüz Erman A., Dilo A., and Havinga P., “A virtual infrastructure based on honeycomb tessellation for data dissemination in multi-sink mobile wireless sensor networks”, EURASIP Journal on Wireless Communications and Networking, 2012. *SCI-E Indexed*.
2. Tüysüz Erman A., Dilo A., van Hoesel L., and Havinga P., “On Mobility Management in Multi-sink Sensor Networks for Geocasting of Queries”, Sensors Journal, MDPI, 11 (12). pp. 11415-11446, 2011. *SCI-E Indexed*.
3. Tüysüz Erman A., van Hoesel L., Havinga P., and Wu J., “Enabling mobility in heterogeneous wireless sensor networks cooperating with UAVs for mission critical management”, IEEE Wireless Communications Magazine, 15(6):38–46, 2008. *SCI Indexed*.
4. Tüysüz A. and Alagöz F., “Satellite Mobility Pattern Scheme for Central and Seamless Handover Management in LEO Satellite Networks”, In Journal of Communications and Networks (JCN), vol. 8, no. 4, 451-460, pp. 451-460, December 2006. *SCI Indexed*.

### 7.2. Uluslararası bilimsel toplantılarda sunulan ve bildiri kitabında (Proceedings) basılan bildiriler

1. Tüysüz Erman A. and Havinga P., “Data dissemination of emergency messages in mobile multi-sink wireless sensor networks,” In Med-Hoc-Net’10: Proceedings of the 9th IFIP Annual Mediterranean Ad Hoc Networking Workshop, pp. 1–8, Juan Les Pins, France, June 2010. IEEE.
2. Tüysüz Erman A., Dilo A., and Havinga P., “A fault-tolerant data dissemination based on Honeycomb Architecture for Mobile Multi-Sink wireless sensor networks,” In ISSNIP’10: Proceedings of 6<sup>th</sup> International Conference on Intelligent Sensors, Sensor Networks and Information Processing, pp. 97–102, Brisbane, Australia, Dec 2010. IEEE.
3. Tüysüz Erman A., Mutter T., van Hoesel L., and Havinga P., “A cross-layered communication protocol for load balancing in large scale multi-sink wireless sensor networks,” ISADS’09: Proceedings of the 9th International Symposium on Autonomous Decentralized Systems, pp. 1–8, March 2009.
4. van Hoesel L., Tüysüz Erman A., and Havinga P., “Combined Coverage Area Reporting and Geographical Routing in Wireless Sensor-Actuator Networks for Cooperating with Unmanned Aerial Vehicles,” In 3rd ERCIM Workshop On eMobility, pp. 43–54, Enschede, The Netherlands, May 2009. Centre for Telematics and Information Technology, University of Twente.
5. van Hoesel L., Tüysüz Erman A., and Havinga P., “Ideas on node mobility support in schedule-based medium access,” ISSNIP’08: Proceedings of 4rd International Conference on Intelligent Sensors, Sensor Networks and Information Processing, pp. 539–544, December 2008.

6. Tüysüz A. and Alagöz F., and Erman K., "A New Algorithm for Handover Management in LEO Satellite Networks," In Proc. of IEEE GLOBECOM 2006, San Francisco, USA, December 2006.
7. Tüysüz A. and Alagöz F., "Satellite Mobility Pattern Based Handover Management Algorithm in LEO Satellites," In Proc. of IEEE International Conference on Communications (ICC'06), Istanbul, Turkey, June 2006.

### 7.3. Yazılan uluslararası kitaplar veya kitaplarda bölümler

1. Tüysüz Erman A. (2011), "*Multi-sink mobile wireless sensor networks: dissemination protocols, design and evaluation*," PhD thesis, University of Twente, CTIT Ph.D.-thesis series No. 11-206 ISBN 978-90-365-3251-8
2. Tüysüz Erman A., Schwartz R. S., Dilo A., Scholten H., and Havinga P., "Infrastructure Assisted Data Dissemination for Vehicular Sensor Networks in Metropolitan Area," to appear in book "Roadside Networks for Vehicular Communications: Architectures, Applications and Test Fields", IGI-Global, 2012.
3. Tüysüz A. and Yıldırım M., "A New Algorithm for Horizontal Handover Management in Wireless Mobile Networks," In New Trends in Computer Networks, Imperial College Press, Istanbul, Turkey, October 2005.

### 7.4. Ulusal hakemli dergilerde yayınlanan makaleler

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### 7.5. Ulusal bilimsel toplantılarda sunulan ve bildiri kitabında basılan bildiriler

1. Tüysüz A., Yıldırım M., and Alagöz F., "Kablosuz Üstüne Bindirmeli Ağlarda Mobil IPv6 Tabanlı El Değiştirmeler," Conference on Academic Information'05 (Akademik Bilişim 2005), Gaziantep, Turkey, 2005.

### 7.6. Diğer yayınlar

1. Tüysüz Erman A., van Hoesel L., and Havinga P., "Enabling Mobility in Wireless Sensor Networks Cooperating with UAVs for Mission-Critical Management," In DCOSS'08: Proceedings of the 4<sup>th</sup> IEEE/ACM International Conference on Distributed Computing in Sensor Systems (Poster Paper), Santorini Island, Greece, June 2008. IEEE/ACM.

## 8. Ulusal & Uluslararası Projeler

- AWARE Project, [\*Platform for Autonomous self deploying and operation of Wireless sensor-actuator networks cooperating with AeRial objEcts\*](#), European Union Project, 2007-2009

- RECONSURVE-NL Project, A Reconfigurable Surveillance System with Smart Sensors and Communication for detecting small non-cooperative ships, ITEA2 Project, 2011-2012
- TÜBİTAK TEYDEB, TİM (Turkcell İletişim Modülü) projesi, Nisan 2012
- İstanbul Kalkınma Ajansı'na sunulmuş Cankurtaran Sensörler projesi, Temmuz 2012
- TÜBİTAK-BİDEB 2209-B, IPContest 2012 Uluslararası Proje Yarışması

## 9. İdari Görevler

- Başkan Yardımcısı, Turkish Student Association at Twente University (TUSAT), 2008-2009

## 10. Bilimsel ve Mesleki Kuruluşlara Üyelikler

- Üye, IEEE Communications Society

## 11. Ödüller

- Yeditepe Üniversitesi lisans öğrenim bursu
- Yüksek onur derecesi:  
Yeditepe Üniversitesi lisans mezuniyeti – 2004  
Boğaziçi Üniversitesi yüksek lisans mezuniyeti – 2006

## 12. Son iki yılda verdiğiniz lisans ve lisansüstü düzeydeki dersler

Akademik yıl	Dersin Adı	Haftalık Saat			Öğrenci Sayısı
		Ders	Uyg.	Lab.	
2011-2012	Introduction to Programming	3	0	2	72
	Wireless Sensor Networks	3	0	0	23

## 13. Diğer akademik ve bilimsel faaliyetler

### Hakemlik:

- Elsevier Science, Computer Communications Journal
- Elsevier Science, Pervasive and Mobile Computing Journal
- Oxford University Press, Computer Journal
- IEEE Transactions on Vehicular Technology
- InderScience, International Journal of Sensor Networks
- Turkish Journal of Electrical Engineering and Computer Science
- Çok sayıda uluslararası konferansta hakemlik (SECON, ISSNIP, ICC, vb.)

### Ulusal ve Uluslararası Konferans Teknik Program Komite Üyelikleri:

- The 8th International Conference on Geo-information for Disaster Management (Gi4DM 2012)