

## SELÇUK TAŞCIOĞLU

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### Education

PhD	Electronics Engineering	Ankara University	2011
MSc	Electronics Engineering	Ankara University	2004
BSc	Electronics Engineering	Ankara University	2001

### PhD Thesis

“Changepoint Analysis Based Wideband Spectrum Sensing for Cognitive Radio Networks”  
Supervisor: Doç. Dr. Ziya TELATAR

### BSc Thesis

“Investigation of Synchronization and Channel Equalization Techniques for OFDM Systems”  
Supervisor: Prof. Dr. Mümtaz YILMAZ

### Research Interests

Wireless Communications:  
Cognitive radio and dynamic spectrum access, OFDM systems

Signal Processing:  
RF fingerprinting of wireless devices, changepoint analysis, MCMC methods

### Work Experience

Assistant Professor	Electrical and Electronics Engineering Department Ankara University	2012-
Research Assistant	Electrical and Electronics Engineering Department Ankara University	2002-2011
Visiting Fellow	Communications Research Centre Canada International Research Fellowship Programme of the Scientific and Technological Research Council of Turkey (TÜBİTAK)	2007-2008

## **Teaching**

Signal Analysis and Processing (PhD program)

Graduate Specialization Course (Graduate program)

Probability and Random Variables

Modeling and Simulation

Solid State Electronics

Project (undergraduate program)

## **PUBLICATIONS**

### **International Journal Publications**

M. Köse, S. Taşcıoğlu and Z. Telatar, "RF Fingerprinting of IoT Devices Based on Transient Energy Spectrum," in IEEE Access, vol. 7, pp. 18715-18726, 2019.

M. Köse, S. Taşcıoğlu, and Z. Telatar, "Wireless device identification using descriptive statistics", Communications, Faculty of Science, University of Ankara, Series A2-A3: Physics, Engineering Physics, Electronic Engineering and Astronomy, vol.: 57 Issue: 1, 2015.

M. Köse, S. Taşcıoğlu, and Z. Telatar, "Signal-to-noise ratio estimation of noisy transient signals", Communications, Faculty of Science, University of Ankara, Series A2-A3: Physics, Engineering Physics, Electronic Engineering and Astronomy, Vol.: 57 Issue: 1, 2015.

S. Taşcıoğlu, Z. Telatar "Periodogram Smoothing for Wideband Spectrum Analysis Using Bayesian Curve Fitting". Communications, Faculty of Science, University of Ankara, Series A2-A3: Physics, Engineering Physics, Electronic Engineering and Astronomy, vol. 53, no. 1-2, pp. 1-13, 2011.

M. Köse, S. Taşcıoğlu, Z. Telatar, "Bayesian Change Point Analysis Using the Phase Distribution of Complex Signals". Communications, Faculty of Science, University of Ankara, Series A2-A3: Physics, Engineering Physics, Electronic Engineering and Astronomy, vol. 53, no. 1-2, pp. 15-23, 2011.

S. Tascioglu, O. Ureten, Z. Telatar, "Impact of Noise Power Uncertainty on the Performance of Wideband Spectrum Segmentation", A Special Issue on Cognitive radio communications and software defined radio, Radioengineering, vol. 19, no. 4, pp. 561-566, December 2010.

O. Ureten, S. Tascioglu, "Autocorrelation Properties of OFDM Timing Synchronization Waveforms Employing Pilot Subcarriers". EURASIP Journal on Wireless Communications and Networking, Special Issue on Synchronization in Wireless Communications, vol. 2009, Article ID 538978, 14 pages, 2009.

### **National Journal Publications**

M. Köse, S. Taşcıoğlu, Z. Telatar "Değişim noktası kestirimi için CUSUM algoritmasının başarımlı değerlendirilmesi" DÜMF Mühendislik Dergisi, vol. 9 no. 1, pp. 99-108, 2018.

S. Taşcıođlu, M. Köse, Z. Telatar "Polinom uydurma yöntemi kullanarak RF parmak izi çıkarımı" DÜMF Mühendislik Dergisi, vol. 9 no. 1, pp. 89-97, 2018.

### **International Conference Publications**

Ö. Alpergün, S. Taşcıođlu, M. Köse, "Performance Analysis of Transmitter Identification Based on I/Q Imbalance Estimation" 11th International Conference on Electronics, Computers and Artificial Intelligence (ECAI 2019), 2019.

S. Taşcıođlu, M. Köse, and Z. Telatar, "Effect of sampling rate on transient based RF fingerprinting," in Proc. 10th International Conference on Electrical and Electronics Engineering (ELECO2017), 2017, pp. 1156–1160.

Köse, M.; Taşcıođlu, S.; Telatar, Z. "The Effect of Transient Detection Errors on RF Fingerprint Classification Performance", 14th International Conference on Circuits, Systems, Electronics, Control & Signal Processing (CSECS '15), Konya, Turkey, 20-22 May 2015.

S. Tascioglu, O. Ureten, "Bayesian Wideband Spectrum Segmentation for Cognitive Radios", 18th International Conference on Computer Communications and Networks (ICCCN 2009), San Francisco, CA USA, 3-6 Aug. 2009.

O. Ureten, S. Tascioglu, N. Serinken, M. Yilmaz, "Search for OFDM Synchronization Waveforms with Good Aperiodic Autocorrelations", Canadian Conference on Electrical and Computer Engineering (CCECE 2004), pp. 13-18, Niagara Falls, Ontario, Canada, 2-5 May 2004.

### **National Conference Publications**

Köse, S. Taşcıođlu, Z. Telatar, "Statistical Analysis of Signal Phase for Wireless Local Area Networks", International 7th Statistics Congress, Antalya, Turkey, 28 Apr - 1 May. 2011.

S. Taşcıođlu, O. Üreten, "Özilintisi İyi Karmaşık Eşzamanlama İşareti Aramak İçin Bir Yöntem", URSI 3. Ulusal Bilimsel Kongresi Bildiriler Kitabı, s. 511-513, Ankara, Türkiye, 6-8 Eylül 2006.

S. Taşcıođlu, O. Üreten, N. Serinken, M. Yılmaz, "A technique to determine number and locations of frame synchronization pilot carriers in pilot-based OFDM systems", Proceedings of the IEEE 12th Signal Processing and Communications Applications Conference, 2004., Kusadasi, Turkey, 2004, pp. 61-64.

### **Presentations**

"Application of MCMC Methods for Spectrum Opportunity Detection"  
Communications Research Centre Canada, Ottawa, Canada, 12 June, 2018.

"Spectrum Hole Detection Based on Changepoint Analysis for Cognitive Radio Applications"  
Communication Technologies Workshop, Aselsan, Ankara, Turkey, 13-14 Oct. 2011.