

# ENGİN MAŞAZADE

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## CONTACT

### INFORMATION

Sabanci University,  
Faculty of Engineering and Natural Sciences, 2017 Communications and Networking  
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Syracuse University,  
Department of Electrical Engineering and Computer Science, 3-177, Center for Science  
and Technology, Syracuse, NY 13244, USA  
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*Voice:* (+1 315) 5609755

## CITIZENSHIP

Turkey

## RESEARCH

### INTERESTS

- Distributed detection, estimation, localization and tracking for wireless sensor networks
- Bit-error rate estimation and cross-layer design for Multiband OFDM systems,

## EDUCATION

**Syracuse University**, Syracuse, New York, USA

PhD. (Visiting Student), Electrical Engineering and Computer Science (2008 - 2009)

- Advisor: Professor Pramod K. Varshney

**Sabanci University**, Istanbul, Turkey

PhD. Candidate , Department of Electronics Engineering (February 2006 - expected:  
June 2010 )

- Thesis Topic: Optimum detection and estimation strategies for Wireless Sensor Networks, Energy Performance Tradeoffs
- Advisor: Dr. Mehmet Keskinöz

**Sabanci University**, Istanbul, Turkey

M.Sc , Department of Electronics Engineering and Computer Science (September  
2003 - January 2006)

- Thesis Topic: Instantaneous bit error rate estimation based link adaptation and scheduling in Multiband OFDM based UWB WPANs
- Advisor: Dr. Mehmet Keskinöz

**Istanbul Technical University**, İstanbul, Turkey

B.Sc , Electronics and Communication Engineering (September 1999 - June 2003)

## PUBLICATIONS

### - Book Chapter

- R. Niu, L. Zuo, E. Maşazade, and P. K. Varshney, “Conditional posterior Cramer-Rao lower bound and its applications in adaptive sensor management”, *Distributed Video Sensor Networks*, Springer, 2010.

### - Journal Papers

- E. Maşazade, R. Niu, P. K. Varshney, M. Keskinöz, “Energy Aware Iterative Source Localization Schemes for Wireless Sensor Networks”, Under review, *IEEE Transactions on Signal Processing*, 2010.
- E. Maşazade, R. Rajagopalan, P. K. Varshney, C. K. Mohan, G. K. Sendur, M. Keskinöz, “A Multiobjective Optimization Approach to Obtain Decision Thresholds for Distributed Detection in Wireless Sensor Networks”, *IEEE Transactions on Systems, Man, and Cybernetics–Part B*, Volume: 40, Issue: 1, 2009.
- E. Maşazade, M. Keskinöz, “An Efficient Realization Bit Error Rate Estimation Method for Multiband OFDM based UWB Systems”, *European Transactions on Telecommunications*, Wiley InterScience, 2009.
- M. Keskinöz, O. Gurbuz, E. Maşazade, “Cross-Layer Enhanced Time Scheduling for Multi-Band OFDM UWB Networks”, *Wireless Networks*, Springer Netherlands, March 25, 2009. [Online]. Available: <http://dx.doi.org/10.1007/s11276-009-0173-2>

### - Conference Proceedings

- E. Maşazade, R. Niu, P. K. Varshney, M. Keskinöz, “A Probabilistic Communication Scheme for Distributed Estimation in Wireless Sensor Networks” Accepted to be presented at *IEEE Proc. 44<sup>rd</sup> Conference on Information Sciences and Systems (CISS’10)*, Princeton, NJ, March 2010.
- E. Maşazade, R. Niu, P. K. Varshney, M. Keskinöz, “A Monte Carlo Based Energy Efficient Source Localization Method for Wireless Sensor Networks”, *IEEE Proc. 3<sup>rd</sup> International Workshop on Computational Advances in Multi-Sensor Adaptive Processing, CAMSAP’09*, Aruba, Dutch Antilles, December 13-16 2009.
- E. Maşazade, R. Niu, P. K. Varshney, M. Keskinöz, “An Energy Efficient Iterative Method for Source Localization in Wireless Sensor Networks”, *IEEE Proc. 43<sup>rd</sup> Conference on Information Sciences and Systems (CISS’09)*, Baltimore, MD, March 2009.
- E. Maşazade, R. Rajagopalan, P. K. Varshney, G. K. Sendur, and M. Keskinöz, “Evaluation of local decision thresholds for distributed detection in wireless sensor networks using multi-objective optimization”, *IEEE Proc. 42<sup>nd</sup> Asilomar Conference on Signals, Systems and Computers*, Pacific Grove, CA, October 2008.
- K. Eritmen, E. Maşazade, M. Keskinöz, “A Simplified Parallel Distributed Detection Method for Wireless Sensor Networks under Fading Channels” *IEEE Proc. 15<sup>th</sup> Signal Processing and Communications Applications, SIU*, 11-13 June 2007 Page(s):1 - 4, Eskisehir, Turkey (in Turkish).

- E. Maşazade, M. Keskinöz, O. Gurbuz, “Proportional Time Sharing with Frame Size Adaptation for MB-OFDM based UWB WPANs”, *IEEE Proc. Long Island Systems, Applications and Technology Conference, 2006 (LISAT)*, 5 May 2006 Page(s):1 - 7.
- E. Maşazade, M. Keskinöz, O. Gurbuz; “A Proportional Time Scheduling Scheme with Frame Size Adaptation for MB-OFDM UWB WPANs”, *IEEE Proc. 14<sup>th</sup> Signal Processing and Communications Applications (SIU)*, 2006 17-19 April 2006 Page(s):1 - 4, Antalya, Turkey (in Turkish).

TEACHING  
EXPERIENCE

**Sabanci University**, Tuzla, Istanbul, 34956, Turkey

- *Teaching Assistant*

- Fall 2003, Fall 2004 - *Introduction to Probability and Statistics* (Sophomore level)
- Spring 2004, Spring 2005 *Digital Communications* (Junior level)
- Spring 2004 *Discrete time signal processing* (Junior level)
- Fall 2006, Fall 2006 *Introduction to Communication Systems* (Junior level)
- Spring 2005, Fall 2007 *Wireless Communications* (Senior Level)
- Fall 2005 *Signals* (Sophomore level)
- Spring 2006 *Differential Equations* (Sophomore level)
- Spring 2007 *Calculus II* (Freshman level)

- *Duties*

- Recitation Instructor once / twice a week, regular office hours, homework and quiz preparation, grading, organizing MATLAB workshops.

AWARDS

- Received Abroad Research Support Scheme from Scientific and Technological Research Council of Turkey (TUBITAK), (2007)
- Submission to IEEE SIU 2006 is selected as one of the 10 best papers for IEEE Student Paper Award (2006)
- Received full scholarship for graduate study at Sabanci University, Faculty of Engineering and Natural Sciences.(2003)

TECHNICAL PAPER  
REVIEWS

- *Journal Papers*

- IEEE, Transactions on Wireless Communications 2010.
- IEEE, Sensors Journal, 2010.
- IEEE, Signal Processing Letters, 2009.
- Decision Support Systems, special issue on Multiple Criteria Decision Making and Decision Support Systems, 2009.
- EURASIP Journal on Advances in Signal Processing, 2009.
- IEEE, Transactions on Signal Processing, 2008

- *Conference Proceedings*

- IEEE, Workshop on Computational Advances in Multi-Sensor Adaptive Processing, CAMSAP 2009.
- IEEE, Conference on Sensor and Ad Hoc Communications and Networks, SECON 2008

#### TECHNICAL SKILLS

- **MATLAB**: linear algebra, statistics, communication theory, signal processing, non-linear numerical optimization, visualization.
- *Engineering Tools*: OPNET Network Modeller, Systemview Elanix, MATLAB Simulink, LINGO;
- *Programming Language*: C
- *Web Developing Tools*:HTML, PHP;
- DSP Starter Kit Programming for TMS320C31 and TMS320C6711;
- $\text{\TeX}$ ,  $\text{\LaTeX}$ , Microsoft Office,

#### MEMBERSHIPS

- IEEE Student Member since 2003
- IEEE Communications Society,
- IEEE Signal Processing Society

LANGUAGE SKILLS Turkish (native), English (proficient), German (beginner)