

## KEMAL BIÇAKCI

Computer Engineering Department  
TOBB University of Economics and Technology  
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### AREAS OF INTEREST

- Information security (usable security, knowledge-based authentication, graphical passwords)
- Applied cryptography (digital signatures)
- Wireless networks, Sensor networks (optimization, linear programming)
- Usability, Human-computer interaction
- Health informatics, Information Systems

### EDUCATION

|  |           |
|--|-----------|
| <b>Vrije University, Amsterdam, The Netherlands</b><br><i>Department of Computer Science, Postdoc Researcher</i>   | 2004-2006 |
| <b>Middle East Technical University, Ankara, Turkey</b><br><i>Doctor of Philosophy in Information Systems</i><br><u>Dissertation Title:</u> On the Efficiency of Authentication Protocols, Digital Signatures and Their Applications in E-Health: A Top-Down Approach<br><u>Advisor:</u> Professor Nazife Baykal | 2000-2003 |
| <b>University of Southern California (USC), Los Angeles, USA</b><br><i>Master of Science in Electrical Engineering (program in computer networks)</i><br><u>Research Areas:</u> Lightweight Non-repudiation Techniques<br><u>Advisor:</u> Professor Gene Tsudik and Professor Brian Tung                         | 1997-1999 |
| <b>Hacettepe University, Ankara, Turkey</b><br><i>Bachelor of Science in Electrical and Electronics Engineering</i><br><u>Thesis Title:</u> Implementation of RSA Crypto-system<br><u>Advisor:</u> Professor Levent Ertaul   | 1992-1996 |
| <b>Ankara Atatürk Anatolian High School, Ankara, Turkey</b><br>High School   | 1985-1992 |

### PROFESSIONAL EXPERIENCE

|  |                           |
|--|---------------------------|
| <b>TOBB University of Economics and Technology, Ankara, Turkey</b><br><i>Computer Engineering Department, Associate Professor</i><br><i>Electrical and Electronics Engineering Department, Assistant/Associate Professor</i> | 2010-Present<br>2007-2010 |
| <b>Carleton University, Ottawa, Canada</b><br><i>School of Computer Science, Visiting Scholar</i>  | 2011                      |
| <b>Turkish Army, Ankara, Turkey</b><br><i>Compulsory Military Service, Lieutenant</i>  | 2006-2007                 |
| <b>EU Education and Youth Programmes National Agency, Ankara, Turkey</b><br><i>IT Coordinator</i>  | 2006                      |
| <b>Vrije University, Amsterdam, The Netherlands</b><br><i>Department of Computer Science, Postdoc Researcher</i>   | 2004-2006                 |
| <b>Middle East Technical University, Ankara, Turkey</b><br><i>Informatics Institute, Instructor &amp; TA</i>   | 2000-2006                 |

**University of Southern California, Los Angeles, USA***Information Sciences Institute (ISI), Research Assistant*

1997-2000

**Middle East Technical University, Ankara, Turkey***Electrical and Electronics Engineering Department, Teaching Assistant*

1996-1997

**PROJECT EXPERIENCE****Advanced Training Course**

Hands-on, Cyber Defense Training Course for System/Network Administrators

Role: Specialist

Funded by NATO Emerging Security Challenges (ESC) Division, SPS Programme

2012-2013

**Human-Interaction Proof**

Accessible and Usable Human-Interaction Proof: Can Cheap Labor Be a Solution?

Role: Project Coordinator

Funded by Turkish Scientific and Technological Research Institute (TUBITAK).

2011-2012

**Graphical Passwords**

Design and Implementation of Secure and Usable Graphical Password Methods

Role: Project Coordinator

Funded by Turkish Scientific and Technological Research Institute (TUBITAK).

2008 - 2010

**Avicenna**

Network of universities for open distance learning.

Responsible for producing an online computer security and cryptography course.

Role: Tutor

Funded by UNESCO.

2004 - 2006

**SecureE-Justice**

Secure Communication and Collaboration Framework for the Judicial Co-operation Environment.

Responsible for security evaluation.

Role: Post doctorate Researcher

Funded by EU FP6.

2004 - 2006

**SAS**

Server Assisted Signatures

Implementation of SAS protocol using OPENSLL library

Role: Graduate Research Assistant

Funded by NSF.

1999 - 2000

**FLOTS**

Flexible One-Time Signatures

Implementation of one-time digital signatures using RSAREF and multiprecision library.

Role: Graduate Research Assistant

Funded by NSF.

1998 - 2000

**CRISIS**

Critical Resource Allocation and Intrusion Response for Survivable Information Systems,

Participation in the design and definition of the common intrusion detection framework.

Role: Graduate Research Assistant

Funded by NSF.

1998 - 1999

**TEACHING EXPERIENCE****TOBB University of Economics and Technology, Ankara, Turkey***Information Security and Cryptography**Discrete Mathematics*

*Mobile Communication*  
*Human-Computer Interaction*  
*Operating Systems*  
*Communication Systems*  
*Digital Electronics*

**Middle East Technical University, Ankara, Turkey**  
*Computer Security and Cryptography*  
*Information Systems*  
*Networking for Health Information Systems and Telehealth*

#### **PUBLISHED/ACCEPTED JOURNAL PAPERS**

- [J19] H. Cotuk, **K. Bicakci**, B. Tavli, E. Uzun, "*The Impact of Transmission Power Control Strategies on Lifetime of Wireless Sensor Networks*", to appear in IEEE Transactions on Computers.
- [J18] **K. Bicakci**, B. Crispo, G. Oligeri, "*LAKE: A Server-Side Authenticated Key-Establishment with Low Computational Workload*", to appear in ACM Transactions on Internet Technology.
- [J17] **K. Bicakci**, I.E. Bagci, B. Tavli, Z. Pala, "Neighbor sensor networks: Increasing lifetime and eliminating partitioning through cooperation", *Computer Standards & Interfaces* 35(4): 396-402 (2013).
- [J16] **K. Bicakci**, Y. Uzun, "A second look at the performance of neural networks for keystroke dynamics using a publicly available dataset," *Computers & Security (Elsevier)*, Volume 31, Number 5, July 2012, pp. 717-726 [doi:10.1016/j.cose.2012.04.002].
- [J15] **K. Bicakci**, I. E. Bagci, and B. Tavli, "Communication/computation tradeoffs for prolonging network lifetime in wireless sensor networks: the case of digital signatures," *Information Sciences (Elsevier)*, Volume 188, 1 April 2012, Pages 44-63.
- [J14] B. Tavli, **K. Bicakci**, R. Zilan and J. M. Barcelo, "A Survey of Visual sensor network platforms," *Multimedia Tools Appl.* 60(3): 689-726 (2012).
- [J13] **K. Bicakci**, H. Gultekin, B. Tavli, and I. E. Bagci, "Unobservable wireless sensor networks against global eavesdroppers: lifetime bounds and design guidelines," *Computer Standards & Interfaces*, Volume 33, Issue 4, June 2011, pp. 401-410 [doi:10.1016/j.csi.2011.01.001].
- [J12] **K. Bicakci**, I. E. Bagci, and B. Tavli, "Lifetime Bounds of Wireless Sensor Networks Preserving Perfect Sink Unobservability", *IEEE Communications Letters*, Volume 15, Issue 2, pp. 205-207, 2011 [doi: 10.1109/LCOMM.2011.010311.101885].
- [J11] B. Tavli, M. B. Akgun, and **K. Bicakci**, "Impact of limiting number of links on the lifetime of wireless sensor networks," *IEEE Communications Letters*, Volume 15, Issue 1, pp. 43-45, [doi: 10.1109/LCOMM.2010.01.101846].
- [J10] B. Tavli, M. M. Ozciloglu, and **K. Bicakci**, "Mitigation of compromising privacy by transmission range control in wireless sensor networks," *IEEE Communications Letters*, vol. 14, pp. 1104-1106, 2010 [doi: 10.1109/LCOMM.2010.101210.100731].
- [J09] M. Guerrero-Zapata, R. Zilan, J. M. Barcelo-Ordinas, **K. Bicakci**, and B. Tavli, "The future of security in wireless multimedia sensor networks: a position paper," *Telecommunications Systems*, vol. 45, pp. 77-91, 2010.
- [J08] **K. Bicakci** and B. Tavli, "Prolonging network lifetime with multi-domain cooperation strategies in wireless sensor networks," *Ad Hoc Networks*, vol. 8, pp. 582-596, 2010.
- [J07] **K. Bicakci**, H. Gultekin, and B. Tavli, "The impact of one-time energy costs on network lifetime in wireless sensor networks," *IEEE Communications Letters*, vol. 13, pp. 905-907, 2009.
- [J06] **K. Bicakci** and B. Tavli, "Denial-of-service attacks and countermeasures in IEEE 802.11 wireless networks," *Computer Standards & Interfaces*, vol. 31, pp. 931-941, 2009.

- [J05] **K. Bicakci**, "One-time Proxy Signatures Revisited", *Computer Standards and Interfaces (Elsevier)*, Vol. 29(4), pp. 499-505, May 2007.
- [J04] **K. Bicakci**, B. Crispo and A.S. Tanenbaum, "How to Incorporate Revocation Status Information into the Trust Metrics for Public-Key Certification", *International Journal of Infonomics*, Special Issue on Selected papers of the ACM SAC 2005 TRECK Track, September 2005.
- [J03] **K. Bicakci**, Nazife Baykal, "Improved Server Assisted Signatures", *Computer Networks (Elsevier)*, Vol.47(3), pp.351-365, February 2005.
- [J02] **K. Bicakci**, G. Tsudik, B. Tung, "How to construct optimal one-time signatures", *Computer Networks (Elsevier)*, Vol.43(3), pp. 339-349, October 2003.
- [J01] **K. Bicakci**, N. Baykal, "Improving the Security and Flexibility of One-time Passwords by Signature Chains", *Turkish Journal of Electrical Engineering & Computer Sciences (ELEKTRIK)*, Vol.11(3), 2003.

#### REFEREED CONFERENCE AND WORKSHOP PAPERS

- [C32] M. Akpulat, **K. Bicakci**, U. Cil, "Revisiting Graphical Passwords for Augmenting, not Replacing, Text Passwords", accepted to ACSAC 2013.
- [C31] U. Cil, **K. Bicakci**, "gridWordX: Design, Implementation, and Usability Evaluation of an Authentication Scheme Supporting Both Desktops and Mobile Devices," *IEEE MoST 2013* (Mobile Security Technologies workshop), San Francisco, May 2013.
- [C30] A. Soylev, **K. Bicakci**, B. Tavli, "Uncovering the Impact of Minimum-Energy Routing on Lifetime of Wireless Sensor Networks", 7th International Workshop on Wireless Sensor, Actuator and Robot Networks (WiSARN 2013-Spring) in conj. with 9th IEEE International Conference on Distributed Computing in Sensor Systems (DCOSS'13) May 20-23, Cambridge, Massachusetts, USA.
- [C29] A. U. Batmaz, B. Tavli, D. Incebacak, **K. Bicakci**, "Impact of Reverse Path Length of Unidirectional Links on the Lifetime of Wireless Sensor Networks", *IEEE International Conference on Communications*, ICC 2013, 9-13 June 2013, Budapest, Hungary.
- [C28] D. Incebacak, **K. Bicakci**, B. Tavli, "Energy Cost of Mitigating Physical Attacks in Wireless Sensor Networks", *5th International Conference on New Technologies, Mobility and Security*, NTMS 2012 Istanbul, Turkey, May 7-10, 2012. IEEE 2012, pp. 1-5.
- [C27] **K. Bicakci**, N.B. Atalay, H.E. Kiziloz, "Johnny in Internet Café: User Study and Exploration of Password Autocomplete in Web Browsers", *7th ACM Workshop on Digital Identity Management (DIM 2011) in conjunction with ACM CCS 2011*, October 21, Chicago, IL, USA.
- [C26] **K. Bicakci**, P.C. van Oorschot. "A Multi-Word Password Proposal (gridWord) and Exploring Questions about Science in Security Research and Usable Security Evaluation", *New Security Paradigms Workshop (NSPW 2011)*, Sept.12-15, Marin County, CA, USA.
- [C25] **K. Bicakci**, N.B. Atalay, M. Yuceel, P. C. van Oorschot. "Exploration and Field Study of a Browser-based Password Manager using Icon-based Passwords". *2nd Workshop on Real-Life Cryptographic Protocols and Standardization (RLCPS'11)*, 4 March 2011, St. Lucia (co-located with FC 2011). Springer LNCS, Proc. of Financial Cryptography and Data Security (FC 2011).
- [C24] S.A. Unlu, **K. Bicakci**, NoTabNab: Protection against the Tabnabbing Attack, *5th APWG eCrime Researchers Summit*, IEEE, October 18-20 2010, Dallas, Texas, USA.
- [C23] D. Incebacak, **K. Bicakci**, and B. Tavli, "Investigating the Tradeoffs between Spatial Granularity and Energy Requirements in Wireless Sensor Networks," in Proceedings of the *European Modeling Symposium*, 2010.

- [C22] **K. Bicakci**, "Pushing the Limits of One-Time Signatures", *In Proc. 2nd International Conference on Security of Information and Networks (SIN 2009)*, 6-10 October 2009, ACM, Gazimagusa, North Cyprus.
- [C21] **K. Bicakci**, N.B. Atalay, M. Yüceel, H. Gürbaşlar, B. Erdeniz, "Towards Usable Solutions to Graphical Password Hotspot Problem", *In Proc. 4th IEEE International Workshop on Security, Trust, and Privacy for Software Applications (STPSA 2009) in conjunction with COMPSAC 2009*, July 20-24 2009, Seattle, Washington, USA.
- [C20] **K. Bicakci**, M. Yüceel, B. Erdeniz, H. Gürbaşlar, N.B. Atalay, "Graphical Passwords as Browser Extension: Implementation and Usability Study", *In Proc. 3rd IFIP WG 11.11 International Conference on Trust Management*, June 15-19, 2009, Purdue University, West Lafayette, USA.
- [C19] **K. Bicakci**, "Optimal Discretization for High-Entropy Graphical Passwords", *In Proc. 23rd International Symposium on Computer and Information Sciences*, IEEE ISCIS 2008, October 27-29, 2008, Istanbul, Turkey.
- [C18] Y. Uzunay, **K. Bicakci**, SHA: A Secure Voice Activated Smart Home for Quadriplegia Patients, *In Proc. International Workshop on Knowledge Discovery and Management in Health Informatics, The IEEE International Conference on Bioinformatics and Medicine 2007*, Silicon Valley, USA, November 2-5, 2007.
- [C17] Y. Uzunay, D. Incebacak and **K. Bicakci**, "Towards Trustable Digital Evidence with PKIDEV: PKI based Digital Evidence Verification Model", *In Proc. 2nd European Conference on Computer Network Defense*, University of Glamorgan, United Kingdom, December 2006.
- [C16] C. Gamage, **K. Bicakci**, B. Crispo, and A. S. Tanenbaum, "Security for the Mythical Air-dropped Sensor Network", *In Proc. 11th IEEE Symposium on Computers and Communications (ISCC 2006)*, IEEE Computer Society, June 2006.
- [C15] K.H. Gulkesen, T. Beyan, H. Gul, **K. Bicakci**, "Reliability of Health Information on the Turkish Web Sites; Fever in Children at Home", *Medical Informatics 2006*, Maastricht, Netherlands. *European Notes in Medical Informatics*, 2006; 2: 433-438.
- [C14] C. Gamage, J. Leiwo, **K. Bicakci**, B. Crispo, A.S. Tanenbaum, "A Cost-Efficient Counter-Intrusion Scheme for One-Time Sensor Networks", *In Proc. 2nd International Conference on Intelligent Sensors, Sensor Networks and Information Processing*, December 2005, Melbourne, Australia.
- [C13] Y. Uzunay, **K. Bicakci**, "UNIDES: An Efficient Real-Time System to Detect and Block Unauthorized Internet Access", *In Proc. of 11th International Conference on Parallel and Distributed Systems (ICPADS 2005)*, IEEE, Computer Society, July 2005.
- [C12] **K. Bicakci**, B. Crispo and A.S. Tanenbaum, "How to Incorporate Revocation Status Information into the Trust Metrics for Public-Key Certification", *In Proc. 20th Annual ACM Symposium on Applied Computing*, ACM, 2005.
- [C11] **K. Bicakci**, C. Gamage, B. Crispo, and A.S. Tanenbaum, "One-Time Sensors: A Novel Concept to Mitigate Node-Capture Attacks", *Security and Privacy in Ad-hoc and Sensor Networks, Second European Workshop, ESAS 2005*, Visegrad, Hungary, July 13-14, 2005, *Lecture Notes in Computer Science 3813*, Springer, 2005.
- [C10] **K. Bicakci**, B. Crispo, A.S. Tanenbaum, "Counting Abuses Using Flexible Off-line Credentials", *Information Security and Privacy, 10th Australasian Conference, ACISP 2005*, Brisbane, Australia, July 4-6, 2005, *Lecture Notes in Computer Science 3574*, Springer, 2005.
- [C09] **K. Bicakci**, N. Baykal, "SAOTS: A New Efficient Server Assisted Signature Scheme for Pervasive Computing", *Security in Pervasive Computing, Lecture Notes in Computer Science 2802*, Springer, 2004.
- [C08] **K. Bicakci**, N. Baykal, "A New Design of Privilege Management Infrastructure with Binding Signature Semantics", *Lecture Notes in Computer Science 3093*, Springer, 2004.
- [C07] **K. Bicakci**, N. Baykal, "Server Assisted Signatures Revisited", *Topics in Cryptology - CT-RSA 2004, The Cryptographers' Track at the RSA Conference 2004*, San Francisco, CA, USA, February 23-27, 2004, *Lecture Notes in Computer Science 2964*, Springer, 2004.

[C06] **K. Bicakci**, N. Baykal, "EVEREST: An Efficient Method for Verification of Digital Signatures in Real-Time Teleradiology", *In Proc. 2004 MEDINFO Symposium*, Organized by IMIA (International Medical Informatics Association), September 2004, San Francisco, USA.

[C05] **K. Bicakci**, N. Baykal, "One-Time Passwords: Security Analysis using BAN Logic and Integrating with Smartcard Authentication", *Lecture Notes in Computer Science 2869*, Springer, 2003.

[C04] **K. Bicakci**, N. Baykal, "Design and Performance Evaluation of a Flexible and Efficient Server Assisted Signature Protocol", *In Proc. IEEE 8th Symposium on Computers and Communications*, June 2003, Antalya, Turkey.

[C03] **K. Bicakci**, N. Baykal, "Infinite Length Hash Chains and Their Applications", *In Proc. of IEEE 11th International Workshops on Enabling Technologies (WETICE 2002)*, June 2002, Pittsburgh, USA.

[C02] **K. Bicakci**, N. Baykal, "Wireless and Mobile Security", *In Proc. 5th KES International Conference*, KES 2001, September 2001, Japan.

[C01] **K. Bicakci**, B. Tung, G. Tsudik, "On constructing optimal one-time signatures", *In Proc. of Fifteenth International Symposium on Computer and Information Sciences, ISCIS 2000*, October 2000, Istanbul, Turkey.

#### REFEREED CONFERENCE AND WORKSHOP PAPERS IN TURKISH

[CT09] A.U. Batmaz, B.Tavlı, D. İncebacak, **K. Bıçakcı**, "Tek Yönlü Bağlantı Tokalaşma Atlama Uzunluğunun Kablosuz Algılayıcı Ağ Yaşam Süresine Etkileri", SİU 2013, 21. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, 24-26 Nisan 2013, Girne , KKTC.

[CT08] E. Uzun, A. Aksaç, O. Öztürk, H.E. Kızıllöz, D. İncebacak, B.Tavlı, **K. Bıçakcı**, " Kablosuz Algılayıcı Ağlarda Yaşam Süresi Eniyilemesi Ve Yerel Yönlendirme Ödünleşmesi", SİU 2013, 21. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, 24-26 Nisan 2013, Girne , KKTC.

[CT07] M. Akpulat, **K. Bıçakcı**, U. Çil, "Metin ve Grafıksel Öğeleri Birleştiren Yeni bir Parola Tabanlı Kimlik Doğrulama Yöntemi", V. International Information Security and Cryptology Conference - ISCTURKEY 2012, Ankara, Turkey, May 17-18, 2012. pp.75-80.

[CT06] M.B. Akgun, B. Tavli and **K. Bicakci**, "Kablosuz Algılayıcı Ağlarda Bağlantı Sayısının Sınırlandırılmasının Ağ Ömrü Üzerindeki Etkilerinin İncelenmesi", *ELECO 2010, Elektrik-Elektronik ve Bilgisayar Mühendisliği Sempozyumu*, 2-5 Aralık 2010, Bursa.

[CT05] **K. Bicakci**, "Fundamental Principles for Usable Security", 4. Uluslararası Bilgi Güvenliği ve Kriptoloji Konferansı, 6-8 Mayıs 2010, Ankara, Turkey.

[CT04] **K. Bicakci**, "Reverse SSL: A New Solution for the Performance Problem in SSL Servers", *ABG 2008: 2nd National Network and Information Security Symposium*, North Cyprus, May 2008.

[CT03] K.H. Gulkesen, E. Eray, **K. Bicakci**, M.K. Balci, "An Evaluation on Technology Use of Diabetic Patients", 4. *Academic Informatics Conference*, Denizli, Turkey, February 2006.

[CT02] Y. Uzunay and **K. Bicakci**, "A3D3M: A Digital Evidence Verification Model Supported with Public Key Infrastructure (In Turkish)", *In Proc. ABG 2005: National Network and Information Security Symposium*, İstanbul, Turkey, June 2005.

[CT01] **K. Bicakci**, "Alternative Digital Signatures", *Internet Conference, INET-TR*, November 2000, Istanbul, Turkey.

#### NON-REFEREED PAPERS AND POSTERS

[NP07] H. E. Kızıllöz, **K. Bıçakcı**, "SmarTCHA: İnsan Hesaplama Kullanarak Oluşturulan Erişilebilir ve Kullanışlı İnsan Etkileşim İspat Sistemi", *ELECO 2012, Elektrik-Elektronik ve Bilgisayar Mühendisliği Sempozyumu*, 29 Kasım-1 Aralık 2012, Bursa.

[NP06] **K. Bicakci**, N.B. Atalay, M. Yuceel, P.C. van Oorschot, "Exploration and Field Study of a Browser-based Password Manager using Icon-based Passwords", Technical Report TR-11-07 (Jan.21, 2011), School of Computer Science, Carleton University.

[NP05] **K. Bicakci**, M. Yuceel, B. Erdeniz, H. Gurbaslar, N.B. Atalay, "Graphical Passwords as Browser Extension: Implementation and Usability Study, In Proc. of the 5th Symposium on Usable Privacy and Security, SOUPS 2009, Mountain View, California, USA, July 15-17, 2009 (poster).

[NP04] **K. Bicakci**, "Optimal Discretization for High-Entropy Graphical Passwords", Cryptology ePrint Archive, Report 2008/178.

[NP03] **K. Bicakci**, B. Crispo and A.S. Tanenbaum, "Reverse SSL: Improved Server Performance and DoS Resistance for SSL Handshakes", Cryptology ePrint Archive, Report 2006/212.

[NP02] **K. Bicakci**, N. Baykal, "Survivable Authentication for Health Information Systems", Proc. 2003 AMIA Symposium on Computer Applications in Medical Care, November 2003, poster.

[NP01] **K. Bicakci**, N. Baykal, "Introduction to Security in Biomedical Informatics", Proc. BIOMED 2003 - 10th Biomedical Science and Technology Symposium, poster.

#### NUMBER OF CITATIONS

**370** (Source: Google Scholar, Last Accessed: May 7th, 2013, **h-index:12**),

#### SUPERVISED/CO-SUPERVISED THESIS

- Yusuf Uzunay (2005 – 2006 Academic Year Middle East Technical University Best Thesis Award Winner.), Design And Implementation Of An Unauthorized Internet Access Blocking System Validating The Source Information In Internet Access Logs, MS Thesis, Middle East Technical University, September 2006.
- Davut İncebacak, Design and implementation of a secure and searchable audit logging system, MS Thesis, Middle East Technical University, May 2007.
- İsmail Bahadır Aydın, "E-Voting with Trusted Computing", Master Thesis, TOBB University of Economics and Technology, Computer Engineering Department, August 2009.
- Mustafa Yüceel, "Design and Implementation of Secure and Usable Graphical Password Methods", Master Thesis, TOBB University of Economics and Technology, Computer Engineering Department, September 2010.
- Muhammed Raşit Yıldız, "Graphical password: experimental comparing and field study," Master Thesis, TOBB University of Economics and Technology, Electrical and Electronics Engineering Department, Ankara, Turkey, 2010.
- Mehmet Burak Akgun, "Investigation of the impact of limiting number of links on the lifetime of wireless sensor networks," Master Thesis, TOBB University of Economics and Technology, Ankara, Turkey, 2010.
- İbrahim Ethem Bağcı, "The Impact Of Non-Repudiation And Preserving Perfect Sink Unobservability On The Lifetime Of Wireless Sensor Networks", Master Thesis, TOBB University of Economics and Technology, Ankara, Turkey, April 2011.

#### CURRENT STUDENTS

##### Ph.D. Students

- Yusuf Uzunay, Middle East Technical University.
- Yasin Uzun, Middle East Technical University.
- Davut İncebacak, Middle East Technical University.
- Hakan Ezgi Kızıloz, TOBB University of Economics and Technology.
- Zeydin Pala, Elazığ University.
- Hüseyin Çotuk, TOBB University of Economics and Technology.

##### M.Sc. Students

- Uğur Çil, TOBB University of Economics and Technology.
- Murat Akpulat, TOBB University of Economics and Technology.
- Tashtanbek Satiev, TOBB University of Economics and Technology.

**SERVICE****Member of**

- TUBİTAK TEYDEB (Industrial R&D Program) BILTEG (Information Technologies Group) Committee
- **Editorial Board** - Computer Standards and Interfaces (Elsevier)
- **Editorial Board** - Elektrik – Turkish Journal of Electrical Engineering and Computer Sciences

**Reviewer (Journals - Conferences)**

- IEEE Transactions on Dependable and Secure Computing
- IEEE Communications Letters
- Computer Communications
- Ad Hoc Networks
- Information Sciences
- Computer Security
- Computers & Security
- Elektrik – Turkish Journal of Electrical Engineering and Computer Sciences
- Journal of Gazi University Faculty of Engineering and Architecture
- Various international and national conferences (ISCC 2003, WISA 2005, SecureComm 2005, SAC 2005, ICC 2006, ISCIS 2009, SIU 2009, ELECO 2010, etc.).

**Reviewer (Projects)**

- TUBİTAK TEYDEB (Turkish Scientific and Technological Research Council – Industrial R&D Program)
- TUBİTAK KAMAG (Turkish Scientific and Technological Research Council – State Institutions R&D Program)
- TTGV (Turkish Technology Advancement Foundation)
- TUSIAD (Turkish Association of Industrialists and Businessmen)
- Turkish Ministry of Industry Support Programs (Santez and TeknoGirişim)

**Member of the Technical Program Committee**

- Various international and national conferences (HIBIT 2005, ATC 2006, 2nd National Cryptology Symposium 2006, ABG 2008, ISC-TURKEY 2008,2010, 2012, etc.).

**Consultancy**

- Consultancy for TUBİTAK BİLGEM (Turkish National E-ID Card and MOBILE-ID projects)
- Consultancy for the Turkish Electronic Signature Law (date: 15/1/2004, no: 5070)
- Consultancy for ILG Information Technologies, Cyberpark, Bilkent, Ankara.

**Member**

- Turkish Informatics Association
- IEEE

**HONORS AND AWARDS**

- MS Thesis Supervisor of Yusuf Uzunay, 2005 – 2006 Academic Year Middle East Technical University Best Thesis Award Winner.
- First PhD graduate of Middle East Technical University - Informatics Institute.
- Received a full scholarship from Turkish Government to pursue MS degree in USA.

**PERSONAL**

- Married with three children.
- Enjoy reading and traveling.

**REFERENCES**



- Paul van Oorschot, Prof. Dr., Professor of Computer Science, Canada Research Chair in Authentication and Computer Security, Carleton University, Ottawa, Canada.
- Andrew S. Tanenbaum, Prof. Dr., Head of Computer Systems Section, Department of Computer Science, Vrije Universiteit, Amsterdam, The Netherlands.
- Nazife Baykal, Prof. Dr., Head of Informatics Institute, Middle East Technical University, Ankara, Turkey.
- Gene Tsudik, Prof. Dr., Associate Dean of Research and Graduate Studies, University of California, Irvine, USA.