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Education

1993 – 1999, Ph.D., Bogazici University, Dept. of Computer Engineering

1991 – 1993, M.Sc., Bogazici University, Dept. of Computer Engineering

1987 – 1991, B.Sc., Bogazici University, Dept. of Computer Engineering

Employment

- 2015 – Professor of Computer Science and Engineering, Faculty of Engineering and Natural Sciences, Sabancı University, Istanbul, Turkey
- 2017 – 2018 Visiting Professor, Faculty of Computer Science, Dalhousie University, Halifax, NS, Canada
- 2008 – 2015 Associate Prof. of Computer Science and Engineering, Faculty of Engineering and Natural Sciences, Sabancı University, Istanbul, Turkey
- 2002 – 2007 Assistant Prof. of Computer Science and Engineering, Faculty of Engineering and Natural Sciences, Sabancı University, Istanbul, Turkey
- 2001 – 2002 Consultant, rTrust Technologies, USA
- 1999 – 2002 Post-doctoral research associate, Information Security Lab., Oregon State University, Corvallis, Oregon, USA
- 1999 – 2001 Visiting Asst. Prof., Oregon State University, Dept. of Electrical and Computer Engineering, Corvallis, Oregon, USA
- 1999 Instructor, Bogazici University, Computer Engineering Dept., Istanbul, Turkey
- 1991 – 1999 Research and Teaching Assistant, Bogazici University, Computer Engineering Dept.
- 1992 – 1999 Researcher, Bogazici University, Computer Engineering Dept., Computer Network Research Lab., Istanbul, Turkey

General Research Interests and Areas of Expertise

- Information and Network Security
- Privacy and Security in Wireless, Body Area, Ad Hoc and Sensor Networks
- Digital Certificates and Public Key Infrastructures
- Application-level Network Security Protocols
- E-mail security
- Electronic Commerce and Electronic Payment Systems
- Cloud Computing Security
- IoT Security
- Cryptography
- Computer Networks and Communications

Projects involved

- Smart City, funded by TÜBİTAK (Scientific and Technical Research Council of Turkey). (co-PI: 2023 – 2024)
- FUSE: Full-managed secure gateway for Home Automation Systems, funded by TÜBİTAK (Scientific and Technical Research Council of Turkey) and NCBiR (National Centre for Research and Development in Poland), (PI: 2017 – 2020).
- Secure Communication in Body Area Networks, funded by TÜBİTAK (Scientific and Technical Research Council of Turkey), (PI; 2015 – 2017).
- Akıllı cihazlarda tek kullanımlık anahtar ile güçlendirilmiş güvenli çoklu ortam iletişimi (Secure Multimedia Communication in Smart Devices Reinforced by using One-Time Keys), funded by Turkish Ministry of Science, Industry and Technology San-Tez program (project partner is Netaş Telekomünikasyon A.Ş., (PI; 2015 – 2017).
- Privacy Enhancement for Cloud-based Secure Transaction Signer, funded by Kuveyt Türk Participation Bank R&D Center and Kobil Ltd. (main funding by TÜBİTAK-TEYDEB), (PI; 2014 – 2016).
- Design and Development of Security Infrastructure for Mobile Sensor Networks, funded by TÜBİTAK (Scientific and Technical Research Council of Turkey), (PI; 2011 – 2013).
- Secure and Seamless Payment for Wireless Mesh Networks, funded by Türk Telekom, (PI: 2011 – 2013).
- Privacy Protecting Biometric Authentication Systems, funded by TÜBİTAK (Scientific and Technical Research Council of Turkey), (Researcher; 2006 – 2008).
- Secure and Scalable Key Distribution in Ad Hoc and Sensor Networks, funded by TÜBİTAK-CAREER program (PI; 2005 – 2010).

- Design and Realization of Secure Sensor Network Node Prototype on a Programmable Logic Device (FPGA), funded by TÜBİTAK (Researcher; 2004 - 2007).
- Development of a secure e-mail system based on Account Authority Digital Signature (AADS) model, in Oregon State Uni., sponsored by SITI co., (Researcher; 2000).
- Investigation of fast packet communication and security problems in wireless networks, in BU, sponsored by TÜBİTAK, (Researcher ; 1998).
- Development of key servers for Internet security, in BU, sponsored by B.U. Research Fund, (Researcher ; 1998).
- Design and simulation of computer networks, in BU, sponsored by B.U. Research Fund, (Researcher ; 1994).
- Frame relaying as a fast packet switching technique in heterogeneous computer networks, in BU, sponsored by B.U. Research Fund, (Researcher ; 1993).

Industrial Projects Involved

- Development of Browser Fingerprint and Malware Detection Systems (Bilgisayar Kimliği oluşturma ve Zararlı Yazılım Tespiti Sistemlerinin Geliştirilmesi), funded by fraud.com/HIS, (PI; 2022-2024).
- BEGA: Ağ Trafik Ayırıştırıcı Özellikli Bulut Erişim Güvenlik Aracısı (Cloud Access Security Agent with Network Traffic Classification), project run by NURD Yazılım A.Ş. – Comodo, funded by TÜBİTAK-TEYDEB (Scientific and Technical Research Council of Turkey, Technology and Innovation Funding Programs) under 1501 program, (Consultant; 2019-2020).
- Güvenli Mobil Medya İletiminde Rekabetçi Zengin Servisler ve Merkezi Yönetim Sistemi Tasarımı (Competitive rich services and central management system design for secure media transfer), project run by NETAŞ Telekomünikasyon A.Ş., funded by TÜBİTAK-TEYDEB (Scientific and Technical Research Council of Turkey, Technology and Innovation Funding Programs) under 1501 program, (Consultant; 2019).
- Medya Güvenlik Platformu– İleri Uygulamalar (Media Security Platform – Advanced Applications), project run by NETAŞ Telekomünikasyon A.Ş., funded by TÜBİTAK-TEYDEB (Scientific and Technical Research Council of Turkey, Technology and Innovation Funding Programs) under 1501 program, (Consultant; 2015 – 2016).
- STS (Secure Transaction Signer) - Bulut Tabanlı Uçtan Uca Güvenlik altyapısında Çevrimiçi İşlem İmzalama Teknolojisi (Online Transaction Signing in Cloud Based End-to-End Security Architecture), project run by Kuveyt Türk Participation Bank R&D Center and Kobil Ltd., funded by TÜBİTAK-TEYDEB (Scientific and Technical Research Council of Turkey, Technology and Innovation Funding Programs) under 1501 program, (Consultant; 2014 – 2016).
- AirTies Ürünlerinde İçerik Koruma Teknolojileri ve Ağ Güvenliğine Yönelik Yazılım ve Donanım Tasarımı Yapılması ve Geliştirilmesi (Design and Development of Software and Hardware for Network Security and Content Protection in Airties Products), project run by Airties A.Ş., funded by TÜBİTAK-TEYDEB (Scientific and Technical Research Council of Turkey, Technology and Innovation Funding Programs) under 1501 program, (Consultant; 2015 – 2015).
- Mobil İletişim Sistemleri için Akıllı Cihazlarda Medya Güvenliği Platformu (Media Security Platform for Mobile Operating Systems of Smart Phones), project run by NETAŞ Telekomünikasyon A.Ş., funded by TÜBİTAK-TEYDEB (Scientific and Technical Research Council of Turkey, Technology and Innovation Funding Programs) under 1511 program, (Consultant; 2014 – 2015).
- SIM Tabanlı Güvenlik Uygulamaları (SIM-based Security Applications), project run by PROVUS A MasterCard Company, funded by TÜBİTAK-TEYDEB Scientific and Technical Research Council of Turkey, Technology and Innovation Funding Programs) under 1511 program, (Consultant; 2012 – 2014).
- Development of Broadband Service Manager, sponsored by Gantek Technologies, Turkey, funded by TÜBİTAK-TEYDEB and TTGV (Technology Development Foundation of Turkey) (co-PI; 2004 – 2005).

Educational Experience

- At Sabancı University (2002 – onward): Teaching C++ (service course; 2002 – 2007, 2015), Advanced Programming and Data Structures (2010 – onward), Computer Networks (grad and undergrad level; 2002 –onward), Computer and Network Security (grad and undergrad level; 2003 – onward), Wireless, Ad Hoc and Sensor Networks Security (grad level; 2005 –onward), Privacy Preserved Data Management (grad level; 2005 - 2009) courses
- At Dalhousie University (2018): Cloud Computing course
- At Oregon State University (1999 – 2001): Microprocessor Based System Design and Computer Architecture courses
- At Bogazici University (1993 – 1999): Teaching Programming Language courses

Supervised M.Sc. and Ph.D. Theses

1. Merve Can Kuş, "Differential Privacy in Financial Distributed Ledger Applications", 2022.
2. Artrim Kjamiłji, "Blockchain Driven Secure and Private Machine Learning Algorithms for Post-quantum 5G/6G Enabled Industrial with Applications to Cyber-Security and Health", 2021.

3. Muhammed Ali Bingöl, "Efficient and Secure Schemes for Private Function Evaluation", 2019.
4. Duygu Karaoğlan Altop, "Secure intra-network communication for body area networks", Ph.D. Thesis, 2016.
5. Süleyman Kardaş, "Security and Privacy in RFID Systems", Ph.D. Thesis, 2014 (recipient of Gürsel Sönmez research award).
6. Belal Mohammed Amro, "Privacy aware collaborative traffic monitoring via anonymous access and autonomous location update mechanism", Ph.D. Thesis, 2012.
7. Hayretdin Bahşi, "Privacy preserving data collection framework for user centric network applications", Ph.D. Thesis, 2010.
8. Cavit Özbay, "Blacklisting based anonymous authentication scheme for sharing economy", 2022.
9. Halit Alptekin, "Trapdroid: Bare-metal android malware behavior analysis framework", 2021.
10. Mustafa Aydın, "Intelligent cyber attack detection using social media posts", 2021.
11. Şevval Şimsek, "Privacy preserving identification in home automation systems", 2021.
12. Simge Demir, "Idemix based anonymization for home automation systems", 2021.
13. F.Kerem Örs, "Data driven intrusion detection for 6LoWPAN based IoT systems", 2021.
14. Ahmet Kaşif, "Design of privacy and security centric home automation system", 2020.
15. Beste Seymen, "On the Establishment of Pseudo Random Keys for Body Area Network Security Using Physiological Signals", M.Sc. Thesis, 2019.
16. Ramin Armanfar, "A Practical Privacy-Preserving Public Key Repository", M.Sc. Thesis, 2017.
17. Ömer Mert Candan, "Secure Multimedia Communication in Smart Devices Reinforced by using One-time Keys", M.Sc. Thesis, 2017.
18. Laleh Eskandarian, "Secure Key Agreement Using Cancelable and Noninvertible Biometrics Based on Periodic Transformation", M.Sc. Thesis, 2017.
19. Ramin Armanfar, "A Practical Privacy-Preserving Public Key Repository", 2017.
20. Dilara Akdoğan, "Secure key agreement using pure biometrics", M.Sc. Thesis, 2016.
21. Naim Alperen Pulur, "Medically Adaptive Role Based Access Control Model (MAR-BAC)", M.Sc. Thesis, 2015.
22. Can Serhat Leloğlu, "Secure and seamless prepayment for wireless mesh networks", M.Sc. Thesis, 2013.
23. Merve Şahin, "Dynamic keyring update mechanism for mobile wireless sensor networks", M.Sc. Thesis, 2013.
24. A. Onur Çatakoğlu, "Uneven key predistribution scheme for multiphase wireless sensor networks", M.Sc. Thesis, 2013.
25. Salim Sarımurat, "Hash graph based key predistribution scheme for mobile and multiphase wireless sensor networks", M.Sc. Thesis, 2013.
26. Fırat Hamit Tahaoğlu, "A security and privacy infrastructure for cloud computing using group signatures", M.Sc. Thesis, 2012.
27. Osman Kiraz, "Maintaining trajectory privacy in mobile wireless sensor networks", M.Sc. Thesis, 2012.
28. Can Yıldızlı, "Increasing chances of survival for malware using theory of natural selection & the selfish gene", M.Sc. Thesis, 2011.
29. Kübra Kalkan, "A key distribution scheme for mobile underwater wireless sensor networks", M.Sc. Thesis, 2011.
30. Mustafa Ozan Uysal, "A security framework for mobile communication", M.Sc. Thesis, 2011.
31. Oya Şimşek, "A distributed scheme to detect wormhole attacks in mobile wireless sensor networks", M.Sc. Thesis, 2011.
32. Kevser Karaca, "A key distribution scheme tailored for mobile sensor networks", M.Sc. Thesis, 2011.
33. Hüseyin Ergin, "Implementation of key distribution schemes on real sensor network nodes", M.Sc. Thesis, 2011.
34. Can Yücel, "A secure prepaid micropayment scheme for wireless mesh networks", M.Sc. Thesis, 2010.
35. Murat Ergun, "Resilient and highly connected key predistribution schemes for wireless sensor networks", M.Sc. Thesis, 2010.
36. Duygu Karaoğlan, "A key establishment scheme for wireless mesh networks using identity-based cryptography and threshold secret sharing", M.Sc. Thesis, 2009.
37. Ömer Zekvan Yılmaz, "The effect of time dimension and network dynamics on key distribution in wireless sensor networks", M.Sc. Thesis, 2009.
38. Can Berk Güder, "Efficient and secure delivery of area-persistent safety messages in vehicular ad hoc networks", M.Sc. Thesis, 2008.
39. Abdülhakim Ünlü, "Two-tier, location-aware and highly resilient key predistribution scheme for wireless sensor networks", M.Sc. Thesis, 2006.
40. Sinan Emre Taşçı, "Simple and Flexible Random Key Predistribution Schemes for Wireless Sensor Networks Using Deployment Knowledge", M.Sc. Thesis, 2006.
41. Zafer Gürel, "The Design and Development of Secure Password Synchronization and Querying System for Enterprise Networks", M.Sc. Thesis, 2004.
42. Çağıl Can Öviz, "Design and Development of Cryptographic Fair Exchange Protocols", M.Sc. Thesis, 2004.
43. Burak Bayoğlu, "WTLS (Wireless Transport Layer Security) is the security protocol designed for WAP (Wireless Application Protocol) protocol stack. Negotiation of the security", M.Sc. Thesis, 2004.
44. Mahmut Özcan, "Design and development of practical and secure e-mail system", M.Sc. Thesis, 2003.

Organizational and Administrative Experience

- Local Organization co-chair of BalkanCom 2023 (Sixth International Balkan Conference on Communications and Networking).
- Program co-chair of ISCIS 2016 (31st International Symposium on Computer and Information Sciences).
- Program co-chair of ISCIS 2015 (30th International Symposium on Computer and Information Sciences).
- Program co-chair of ISCIS 2014 (29th International Symposium on Computer and Information Sciences).
- Program co-chair of ISCIS 2013 (28th International Symposium on Computer and Information Sciences).
- General chair, NTMS 2012 (5th IFIP International Conference on New Technologies, Mobility and Security).
- Program co-chair of ISCIS 2012 (27th International Symposium on Computer and Information Sciences).
- Program co-chair of ISCIS 2011 (26th International Symposium on Computer and Information Sciences).
- Workshops chair for NTMS 2011 (4th IFIP International Conference on New Technologies, Mobility and Security).
- Publicity co-chair for GameSec 2010 - Conference on Decision and Game Theory for Security.
- Program Committee co-Chair for Security Track of NTMS 2009 (3rd International Conference on New Technologies, Mobility and Security).
- General Chair of SecureComm 2008 (4th International Conference on Security and Privacy in Communication Networks).
- Local Arrangements Chair of MASCOTS 2007 (15th Annual Meeting of the IEEE International Symposium on Modeling, Analysis, and Simulation of Computer and Telecommunication Systems).
- General and Program co-Chair of ISCIS (International Symposium on Computer and Information Sciences) 2006.
- Chair of external transfers committee at Sabanci University, 2008 – 2012.
- Member of Graduate School Administrative Board at Sabanci University, 2008 – now
- Member of Graduate School Board at Sabanci University, 2011 – now
- Member of Faculty Board at Faculty of Engineering and Natural Sciences, Sabanci University, 2011 – 2015
- Member of Accreditation Committee at Sabanci University, 2012 – now
- Faculty representative to Undergraduate Programs Recruitment Committee, 2008 - 2012
- CS program graduate advisor at Sabanci University, 2005 – 2012, 2019 – 2020.
- Member of external transfers committee at Sabanci University, 2005 – 2012, 2014.
- CS program coordinator at Sabanci University, 2004 – 2005, 2020 – now.
- Chair of the Academic Archive Committee at Sabanci University, 2003 – 2009.
- Participation in the organizing committee of the TAINN 93, ISCIS 94, BAS 96 and ISCIS 97 symposiums.
- Member of the team of the “Elektronik Ticaret Uygulama Gösterileri” which is a roadshow on the electronic commerce applications. This show has been presented about 15 times throughout Turkey in 1998 and 1999.
- Assistant to summer training coordinator, 1998 - 1999.
- Academic advisory for the undergraduate students, 1992 – now.

Academic Service

- Editorial Board Member, Computer Networks, Elsevier, 2012 – now.
- Editorial Board Member, Wireless Networks, Springer, 2019 – now.
- Editorial Board Member, The Computer Journal, Oxford University Press, 2009 – now.
- Editorial Board Member, ITU Journal on Future and Evolving Technologies (ITU J-FET), 2020 – now.
- Editorial Board Member, IET Wireless Sensor Systems, 2013 – now.
- Editorial Board Member, Information Security Journal: A Global Perspective, Taylor & Francis, 2012 – now.
- Guest Editor, Ad Hoc Networks (Elsevier), Special Issue on “Smart Solutions for Mobility Supported Distributed and Embedded Systems”, 2013.
- Technical Program Area co-chair of IEEE CNS 2022 (IEEE Conference on Communications and Network Security).
- Program co-chair of ISCIS 2018 (32nd International Symposium on Computer and Information Sciences).
- Program co-chair of ISCIS 2016 (31st International Symposium on Computer and Information Sciences).
- Program co-chair of ISCIS 2015 (30th International Symposium on Computer and Information Sciences).
- Program co-chair of ISCIS 2014 (29th International Symposium on Computer and Information Sciences).
- Program co-chair of ISCIS 2013 (28th International Symposium on Computer and Information Sciences).
- General chair, NTMS 2012 (5th IFIP International Conference on New Technologies, Mobility and Security).
- Program co-chair of ISCIS 2011 (26th International Symposium on Computer and Information Sciences).
- Program co-chair of ISCIS 2012 (27th International Symposium on Computer and Information Sciences).
- Workshops chair for NTMS 2011 (4th International Conference on New Technologies, Mobility and Security).
- Publicity co-chair for GameSec 2010 - Conference on Decision and Game Theory for Security.
- Program Committee co-Chair for Security Track of NTMS 2009 (3rd International Conference on New Technologies, Mobility and Security).

- General Chair of SecureComm 2008 (4th International Conference on Security and Privacy in Communication Networks).
- Local Arrangements Chair of MASCOTS 2007 (15th Annual Meeting of the IEEE International Symposium on Modeling, Analysis, and Simulation of Computer and Telecommunication Systems).
- General and Program co-Chair of ISCIS (21st International Symposium on Computer and Information Sciences) 2006.
- Technical Program Committee Member – IEEE CNS (IEEE Conference on Communications and Network Security), 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022 (as area co-chair), and 2023.
- Technical Program Committee Member - IEEE ICC (Network Security and Information Assurance Symposium), 2006, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022 and 2023.
- Technical Program Committee Member - iNetSec (Workshop on Open Research Problems in Network Security), 2009, 2010, 2011, 2015 and 2017.
- Technical Program Committee Member - CANS (The International Conference on Cryptology and Network Security), 2016.
- Technical Program Committee Member - CNSM (International Conference on Network and Service Management), 2019, 2020, 2021 and 2022.
- Technical Program Committee Member - TrustCom (IEEE International Conference on Trust, Security and Privacy in Computing and Communications), 2019, 2020, 2021 and 2022.
- Technical Program Committee Member - N2S (International Conference on Network and Service Security), 2009.
- Technical Program Committee Member - PST (Annual Conference on Privacy, Security and Trust), 2009, 2011.
- Technical Program Committee Member - IWCMC (International Wireless Communications and Mobile Computing Conference), 2022, 2023.
- Technical Program Committee Member - Inscrypt (International Conference on Information Security and Cryptology), 2008, 2009, 2010 and 2011.
- Technical Program Committee Member - Q2SWinet (ACM International Symposium on QoS and Security for Wireless and Mobile Networks), 2008, 2009, 2010, 2011, 2012.
- Technical Program Committee Member - BlackSeaCom (International Black Sea Conference on Communications and Networking), 2017, 2018, 2019, 2020, 2021.
- Technical Program Committee Member – WCSP (International Conference on Wireless Communications and Signal Processing), 2017 and 2018.
- Technical Program Committee Member - WISTP (Workshop in Information Security Theory and Practice), 2014, 2015, 2017, 2018 and 2019.
- Technical Program Committee Member - SOSOC (International Workshop on Security in Opportunistic and SOCIAL Networks), 2008.
- Technical Program Committee Member - SESOC (International Workshop on SECURITY and SOCIAL Networking), 2010, 2011, 2012, 2013 and 2014.
- Technical Program Committee Member - IFIP SEC 2010 (25th International Information Security Conference).
- Technical Program Committee Member - SecIoT (International Workshop on the Security of the Internet of Things) 2010, 2012.
- Technical Program Committee Member - DSPSR 2011 (IEEE/IFIP EUC Workshop on Data Management, Security and Privacy in Sensor Networks and RFID).
- Technical Program Committee Member - 2012 Summer FTRA International Symposium on Advances in Cryptography, Security and Applications for Future Computing (ACSA-Summer).
- Technical Program Committee Member - ACM Cyber-Physical System Security Workshop (CPS-SEC) 2015 and 2017.
- Technical Program Committee Member - The 3rd International Conference on Future Internet of Things and Cloud (FiCloud-2015)
- Technical Program Committee Member - The 10th International Conference on Future Networks and Communications (FNC-2015)
- Technical Program Committee Member - International Conference on Future Network Systems and Security (FNSS), 2015, 2016, 2017 and 2018.
- Technical Program Committee Member - The 6th FTRA International Symposium on Advances in Computing, Communications, Security, and Applications (ACSA-14).
- Technical Program Committee Member - International Conference on Information Security Practice and Experience (ISPEC), 2014, 2017, 2018, and 2022.
- Technical Program Committee Member - International Workshop on Cloud Security (IWOCSS2014).
- Technical Program Committee Member - Advanced Intrusion Detection and Prevention Workshop (AIDP'14).
- Technical Program Committee Member - Second International Conference on Security in Computer Networks and Distributed Systems (SNDS-2014)

- Technical Program Committee Member - International Conference on Connected Vehicles & Expo (ICCVE), 2012, 2013, 2014 and 2015.
- Technical Program Committee Member - International Balkan Conference on Communications and Networking (BalkanCom), 2019, 2021, 2022, 2023.
- Technical Program Committee Member – SUCoS 2010 (The First International Conference on Security-enriched Urban Computing and Smart Grid).
- Technical Program Committee Member - SocialComNet (International Workshop on Social Computing, Network, and Services), 2011.
- Technical Program Committee Member - LightSec (Workshop on Lightweight Security & Privacy) 2011, 2013, 2014, 2015, 2016 and 2018.
- Technical Program Committee Member – SPT-IoT (Workshop on Security, Privacy and Trust in the Internet of Things), 2019, 2020, 2021 and 2022.
- Technical Program Committee Member - NTMS (International Conference on New Technologies, Mobility and Security), 2011, 2012.
- Technical Program Committee Member - ISCIS (International Symposium on Computer and Information Sciences) 2001, 2004, 2005, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016 and 2018.
- Technical Program Committee Member - ICCCN (International Conference on Computer Communications and Networks) 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009 and 2010.
- Technical Program Committee Member - IEEE/Create-Net SecureComm (International Conference on Security and Privacy in Communication Networks), 2006, 2007 and 2008.
- Technical Program Committee Member - SECRYPT (International Conference on Security and Cryptography), 2006, 2007, 2008, 2009, 2010, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, and 2023.
- Technical Program Committee Member - IFIP/TC6 Networking, 2007, 2008 and 2013.
- Technical Program Committee Member - IASTED CNIS (The IASTED International Conference on Communication, Network, and Information Security), 2007.
- Technical Program Committee Member - ISA (International Conference on Information Security and Assurance), 2008, 2011.
- Technical Program Committee Member - IEEE Globecom (The IEEE Global Communications Conference), 2007, 2012, 2015.
- Technical Program Committee Member - International Conference on Advances in Computing, Communications and Informatics (ICACCI), 2014, 2016, 2017 and 2018.
- Technical Program Committee Member - SINCONF (International Conference on Security of Information and Networks), 2007, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019 and 2020.
- Technical Program Committee Member - IEEE SIU (IEEE Sinyal İşleme ve İletişim Uygulamaları Kurultayı), 2012, 2014, 2015, 2017 and 2022.
- Technical Program Committee Member - IEEE ISCN (International Symposium on Computer Networks), 2006 and 2008.
- Technical Program Committee Member - IEEE PIMRC (Annual IEEE International Symposium on Personal, Indoor and Mobile Radio Communications), 2011.
- Technical Program Committee Member - ANT (International Conference on Ambient Systems, Networks and Technologies), 2011, 2012, 2013, 2014.
- Technical Program Committee Member - IEEE DSC (IEEE Conference on Dependable and Secure Computing), 2022.
- Technical Program Committee Member - IEEE CloudCom (IEEE International Conference on Cloud Computing Technology and Science), 2013, 2014, 2017, 2018, 2019, 2020 and 2022.
- Technical Program Committee Member - CSS 2013 (5th International Symposium on Cyberspace Safety and Security).
- Technical Program Committee Member - IEEE ISSNIP 2013 (IEEE Eighth International Conference on Intelligent Sensors, Sensor Networks and Information Processing).
- Technical Program Committee Member - EUSPN 2013 (4th International Conference on Emerging Ubiquitous Systems and Pervasive Networks).
- Technical Program Committee Member - IEEE D-SPAN 2013 (4th IEEE International Workshop on Data Security and Privacy in Wireless Networks).
- Technical Program Committee Member - EICC (European Interdisciplinary Cybersecurity Conference), 2021, 2022.
- Technical Program Committee Member - International Symposium on Emerging Information Security and Applications (EISA), 2021.
- Technical Program Committee Member - The Tenth International Conference on Emerging Security Information, Systems and Technologies (SECURWARE), 2016, 2017, 2018, 2019, and 2020.
- Technical Program Committee Member - SSCC 2013 (International Symposium on Security in Computing and Communications).

- Technical Program Committee Member - IASTED NCS (The IASTED International Conference on Networks and Communication Systems), 2006.
- Technical Program Committee Member - SECQOS 2006 (Workshop on Security and QoS in Communication Networks), 2006.
- Technical Program Committee Member – EWSN (European Workshop on Wireless Sensor Networks), 2005.
- Technical Program Committee Member – Med-Hoc-Net (Annual Mediterranean Ad Hoc Networking Workshop), 2004.
- Review Committee Member, ACSAC (Annual Computer Security Applications Conference), 2002, 2003, 2004 and 2005
- Reviewer for numerous symposia, conferences, workshops and journals, including IEEE Transactions on Computers, IEEE Transactions on Mobile Computing, IEEE Transactions on Signal Processing, IEEE Transactions on Information Forensics and Security, IEEE Transactions on Dependable and Secure Computing, IEEE Security and Privacy, IEEE Communications Survey and Tutorials, IEEE Internet of Things Journal, IEEE Computer, IEEE Transactions on Intelligent Transportation Systems, IEEE Communications Magazine, IEEE Access, ACM Transactions of Privacy and Security, International Journal of Information Security (Springer), Security and Privacy (Wiley), IET Communications, IET Information Security, ACM MONET, Computer Networks (Elsevier), Computer Communications (Elsevier), Ad Hoc Networks (Elsevier), Computers & Security (Elsevier), Journal of Systems and Software (Elsevier), WiNet (Wireless Networks), The Computer Journal, Pervasive and Mobile Computing (Elsevier), Journal of Intelligent Manufacturing (Springer), International Journal of Communication Systems (Wiley), Security and Communication Networks (Wiley), Future Generation Computer Systems (Elsevier), Expert Systems, Wireless Personal Communications (Springer), Journal on Wireless Communications and Networking, International Journal of Distributed Sensor Networks, Journal of Information Security and Applications, Journal of Homeland Security and Emergency Management, Journal of Optimization Theory and Applications, International Journal of Information Security and Privacy (IGI-Global), IEEE INFOCOM, IEEE WCNC (IEEE Wireless Communications and Networking Conference), CHES (Cryptographic Hardware Embedded Systems) workshop, ICC (International Conference on Comm.), ISCC (International Symposium on Computer and Comm.), ISWPC (International Symposium on Wireless and Pervasive Computing), ACM SIGCOMM Asia Workshop, IEEE PIMRC, International Journal of Electronic Business (IJEB), Elektrik (TÜBİTAK), The Handbook of Information Security (Wiley).
- Project referee and inspector for various programs of TÜBİTAK TEYDEB, Teknogirisim (Starting Project Grant for SMEs), TTGV (Technology Development Foundation of Turkey), KOSGEB, Türk Telekom, STW (Dutch Research Foundation), and FWF (Austrian Science Fund).
- R&D Center Evaluation Committee Member/Referee for Ministry of Industry and Trade of Turkey
- Panel member for project proposal evaluations submitted to various programs of TÜBİTAK EEEAG.
- Panel member for project proposal evaluations submitted to SAN-TEZ program of Turkish Ministry of Science, Industry and Technology.
- Panel member for scholarship applications submitted to TÜBİTAK BİDEB.
- Panel member and external evaluator for project proposal evaluations submitted to Qatar National Research Fund.
- Promotion Committee Memberships both in Turkey and abroad.
- Evaluator for applications to TUBA-GEBIP (Turkish Academy of Sciences - The Young Scientists Award Programme) and TUBA International Academy Awards.
- Evaluator for applications to Serhat Özyar Yılın Genç Bilim İnsanı Ödülü (Serhat Özyar Young Scientist Award).
- Evaluator for applications to TÜBİTAK Science Prizes Awards.
- Referee for Turkish Technology Awards, 2009, 2010 and 2012.
- Independent expert to evaluate projects proposed to FP6 – IST programme (security and dependability area).
- Independent expert acting as reviewer of ongoing projects for FP7.
- Independent expert to evaluate projects proposed to CHIST-ERA.
- Reviewer of well-known textbook by William Stallings, Cryptography and Network Security: Principles and Practice, 5th ed., 2012.

Scholarship, Prize and Memberships

2022	Graduating Class Teaching Award (at Sabanci University)
2019	TBD (Turkish Informatics Asssocation) Prof. Dr. Aydın Köksal Computer Engineering Science Award
2013 – now	Associate Member of SysSec Consortium (http://www.syssec-project.eu/)
2011	Türk Telekom Research Collaboration Award
2007	Graduating Class Teaching Award (at Sabanci University)
2005	TÜBİTAK Kariyer Award.
1994 - 1997	TÜBİTAK-BİDEB (formerly BAYG) Ph.D. Scholarship
1991	Graduation High Honor Grade (top 4 th of the Department)
1995 - now	ACM, ACM SIGCOMM and ACM SIGSAC Memberships

1996 - now	IEEE and IEEE Communication Society Memberships
1999 - now	IEEE Computer Society Membership
2023 - now	IEEE Signal Processing Society Membership

Keynote Talks

1. "Key Generation for Body Area Networks", delivered at 13th International Conference on Security of Information and Networks (SINCONF 2020), 05 November 2020.
2. "Leveraging Internet of Things (IoT) Security via Machine Learning", delivered at IEEE PIMRC 2019 - Workshop on Machine Learning for Security and Cryptography, 07 September 2019, Istanbul, Turkey.
3. "Wireless sensor network security: trends and challenges", delivered at ICPCA 2012 - 7th International Conference on Pervasive Computing and Applications, 28 November 2012, Istanbul, Turkey.

Invited Talks and Invited Panels

1. "Authentication and Authorization in Connected Cars", invited panel talk delivered at International Automotive Engineering Conference (IAEC 2020), November 10, 2020.
2. "Kritik/Stratejik Teknolojiler ve Yazılım Mühendisliği: Güvenlik ve Mahremiyet", invited panel talk delivered at Ulusal Yazılım Mühendisliği Sempozyumu (UYMS 2020), October 9, 2020.
3. "Key Distribution, Security and Privacy in IoT and Emerging Wireless Network Systems", invited talk delivered at H2020 - National Advisory Group Meeting on Secure Societies, TÜBİTAK, Ankara, Turkey, March 5, 2020.
4. "Key Distribution and Security in IoT and Emerging Wireless Network Systems", invited talk delivered at Ericsson Research Day, Istanbul, November 5, 2019.
5. Invited Panelist at IEEE PIMRC 2019 - IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, Istanbul, September 10, 2019.
6. "Using Human Body as Cryptographic Key", NS-Future Seminar Series, Sabanci University, April 17, 2019.
7. "Cryptographic Key Distribution and Rekeying Strategies in Various Wireless Networks", 1st Workshop on TF-X Integrated Processing Unit Technologies, TUBITAK BILGEM, Gebze, Kocaeli, Turkey, December 11, 2018.
8. "Deriving cryptographic keys from physiological signals and biometrics", Dalhousie University CS Seminar Series, Dalhousie University, Halifax, NS, Canada, November 14, 2018.
9. "Bitcoin: what is it? why it exists? how it survives?", NS-Future Seminar Series, Sabanci University, November 16, 2016.
10. "Key distribution in various network models", International Symposium on Cyber Defense and Security (IS'CyDeS 2016), METU, Ankara, Turkey, May 13, 2016.
11. Invited talk about "Information and network security research" at HAVELSAN 2. Üniversite Sanayi Buluşmayı: Sibergüvenlik (HAVELSAN 2nd University-Industry Collaboration Workshop on Cybersecurity), Ankara, Turkey, April 29, 2016.
12. "Anahtar dağıtımında kriptografik ve kriptografik olmayan yöntemler – Cryptographic and Non-cryptographic methods for key distribution", Uzay ve Hava Gücü Forumu - UZHAF 2016 (Space and Air Force Forum), Turkish Air Force Academy, Istanbul, Turkey, February 24, 2016.
13. "Hash graph based key predistribution scheme for mobile multiphase wireless sensor networks", delivered at BalkanCrypt 2013 - First Workshop on Cryptography and Information Security in Balkans, Sofia, Bulgaria, November 7, 2013.
14. "Restricted and Mobile: Security in Mobile Wireless Sensor Networks", delivered at Crypto Days 2013, organized by TÜBİTAK BILGEM, June 15, 2013.
15. "Security & privacy research: act of following", panel presentation at United-States/Middle-East Workshop On Trustworthiness in Emerging Distributed Systems and Networks, organized by NSF, Koç University, June 5, 2012.
16. Invited Panelist at CSW 2011 - Second Computer Science Student Workshop, Istanbul, April 9, 2011.
17. Invited Panelist at BİLMOK 2011 - 7. Bilgisayar Mühendisliği Öğrencileri Kongresi (7th Computer Engineering Student Congress), Yeditepe University, Istanbul, Feb. 26, 2011.
18. Invited Panelist for the panel on "Turkish Regulation on Cryptographic Tools", organized by Internet User's Association of Turkey and Ankara Bar Association, March 22, 2011.
19. Invites talk about "Registered Email" as Workshop Chair at International Informatics Law Congress (Uluslararası Bilişim Hukuku Kurultayı - UBHK 2010), Izmir, June 11, 2010.
20. Delivered more than 15 public speeches organized by different universities, academic institutions, non-governmental organizations and press.

Personal

Nationality:	Republic of Turkey	
Birth Year:	1969	Marital Status: Married, two children
Languages:	English (very good), Turkish (native), Spanish (beginner level)	

Selected Publications (excluding the ones in Turkish)

Ph.D. Thesis: "Design and Performance Evaluation of the Nested Certification Scheme and its Applications in Public Key Infrastructures", Ph.D. Thesis, Bogazici University, Istanbul, Turkey, 1999, Supervisor: Prof. M. Ufuk Caglayan.

Master Thesis: "Development of Frame Relay Software for High Speed Packet Switched Networks", MS Thesis, Bogazici University, Istanbul, Turkey, 1993, Supervisor: Prof. M. Ufuk Caglayan.

Edited Volumes

1. A. Levi, M. Badra, M. Cesena, M. Ghassemian, Ö. Gürbüz, N. Jabeur, M. Klonowski, A. Mana, S. Sargento and S. Zeadally, Proceedings of 2012 5th International Conference on New Technologies, Mobility and Security (NTMS 2012), IEEE, IEEE Catalog Number: CFP1268E-ART, ISBN: 978-1-4673-0229-6, May 2012.
2. A. Levi, E. Savaş, H. Yenigün, S. Balcısoy and Y. Saygın, Proceedings of International Symposium on Computer and Information Sciences - ISCIS 2006, Springer, LNCS 4263, October 2006.

Guest Editorial

3. A. Levi, Ö. Gürbüz, A. Mana, M. Klonowski, M. Cesena, M. Ghassemian, and S. Sargento (eds.), "A special issue of ad hoc networks on Smart solutions for mobility supported distributed and embedded systems". Ad Hoc Networks vol. 15, pp. 1-3, April 2014.

Refereed Journal Papers and Book Chapters

4. C. Özbay, and A. Levi, "Blacklisting Based Anonymous Authentication Scheme for Sharing Economy", IEEE Transactions on Dependable and Secure Computing, accepted for publication, March 2023.
5. F. K. Örs and A. Levi, "Data driven intrusion detection for 6LoWPAN based IoT systems", Ad Hoc Networks, Volume 143, April 2023, 103120, Elsevier, <https://doi.org/10.1016/j.adhoc.2023.103120>.
6. H. Oz, A. Aris, A. Levi, A. S. Uluğaç, "A Survey on Ransomware: Evolution, Taxonomy, and Defense Solutions", ACM Computing Surveys, ACM Computing Surveys, Volume 54, Issue 11s, Article No.: 238, pp 1–37, Sept. 2022, <https://doi.org/10.1145/3514229>.
7. O. Biçer, M. A. Bingöl, M. S. Kiraz and A. Levi, "Highly Efficient and Re-executable Private Function Evaluation with Linear Complexity", IEEE Transactions on Dependable and Secure Computing, vol. 19, no.2, pp.835-847, March 2022.
8. M. C. Kus and A. Levi, "Investigation and Application of Differential Privacy in Bitcoin," in IEEE Access, vol. 10, pp. 25534-25554, 2022, doi: 10.1109/ACCESS.2022.3151784.
9. S. Demir, S. Simsek, S. Gur and A. Levi, "Secure and privacy preserving IoT gateway for home automation", Computers and Electrical Engineering, Volume 102, Sept. 2022, 108036, Elsevier, doi: 10.1016/j.compeleceng.2022.108036.
10. A. Kamilji, E. Savaş and A. Levi, "Efficient Secure Building Blocks With Application to Privacy Preserving Machine Learning Algorithms," in IEEE Access, vol. 9, pp. 8324-8353, January 2021, doi: 10.1109/ACCESS.2021.3049216.
11. D. Akdoğan, D. Karaoğlan Altop and A. Levi, "Secure key agreement based on ordered biometric features", Computer Networks, vol. 163, Article 106885, Elsevier, DOI: 10.1016/j.comnet.2019.106885, November 2019.
12. M. Gajewski, J. Mongay Batalla, A. Levi, C. Togay, C. X. Mavromoustakis and G. Mastorakis, "Two-tier anomaly detection based on traffic profiling of the home automation system", Computer Networks, vol. 158, pp. 46-60, Elsevier, DOI: 10.1016/j.comnet.2019.04.013, July 2019.
13. M. A. Bingöl, O. Biçer, M. S. Kiraz and A. Levi, "An Efficient 2-Party Private Function Evaluation Protocol Based on Half Gates", The Computer Journal, vol. 62, no. 4, pp. 598–613, Oxford University Press, DOI: 10.1093/comjnl/bxy136, April 2019.
14. D. Karaoğlan Altop, B. Seymen and A. Levi, "SKA-PS: Secure key agreement protocol using physiological signals", Ad Hoc Networks, vol. 83, pp. 111-124, Elsevier, DOI: 10.1016/j.adhoc.2018.09.003, February 2019.
15. B. Amro, A. Levi and Y. Saygın, "Flexible Fair and Collusion Resistant Pseudonym Providing System", The International Arab Journal of Information Technology, vol. 16, no. 1, pp. 80-87, January 2019.
16. M. C. Kus Khalilov and A. Levi, "A Survey on Anonymity and Privacy in Bitcoin-Like Digital Cash Systems", IEEE Communications Surveys & Tutorials, vol. 20, no. 3, pp. 2543-2585, DOI: 10.1109/COMST.2018.2818623 third quarter 2018.
17. D. Akdoğan, D. Karaoğlan Altop, L. Eskandarian and A. Levi, "Secure key Agreement Protocols: Pure Biometrics and Cancelable Biometrics", Computer Networks, vol. 142, pp. 33-48, Elsevier, DOI: 10.1016/j.comnet.2018.06.001, September 2018.
18. D. Karaoğlan Altop, A. Levi and V. Tuzcu, "Deriving Cryptographic Keys from Physiological Signals", Pervasive and Mobile Computing, vol. 39, pp. 65- 79, Elsevier, DOI: 10.1016/j.pmcj.2016.08.004, August 2017.
19. K. Kalkan, A. Levi and S. Zeadally, "Underwater and submerged wireless sensor systems: security issues and solutions", in Wireless Sensor Systems for Extreme Environments: Space, Underwater, Underground and Industrial

- (eds H. F. Rashvand and A. Abedi), John Wiley & Sons, Ltd, Chichester, UK. doi: 10.1002/9781119126492.ch15, June 2017 (invited book chapter).
20. A. Levi and S. Sarımurat, "Utilizing Hash Graphs for Key Distribution for Mobile and Replaceable Interconnected Sensors in the IoT Context", *Ad Hoc Networks*, vol. 57, pp. 3-18, Elsevier, DOI: 10.1016/j.adhoc.2016.08.013, March 2017.
 21. D. Karaođlan Altop, M. A. Bingöl, A. Levi and E. Savaş, "DKEM: Secure and Efficient Distributed Key Establishment Protocol for Wireless Mesh Networks", *Ad Hoc Networks*, vol. 54, pp. 53-68, Elsevier, DOI: 10.1016/j.adhoc.2016.10.001, January, 2017.
 22. S. Kardaş, S. Çelik, M. A. Bingöl, M. S. Kiraz, H. Demirci and A. Levi, "k-Strong Privacy for Radio Frequency Identification Authentication Protocols based on Physically Unclonable Functions", *Wireless Communication and Mobile Computing*, vol. 15, no. 18, pp. 2150 - 2166, Wiley, DOI: 10.1002/wcm.2482, December 2015.
 23. K. Kalkan and A. Levi, "Key Distribution Scheme for Peer-to-Peer Communication in Mobile Underwater Wireless Sensor Networks", *Peer to Peer Networking and Applications (Springer)*, vol. 7, no. 4, pp. 698-709, DOI: 10.1007/s12083-012-0182-2, December 2014.
 24. D. Karaođlan and A. Levi, "A Survey on the Development of Security Mechanisms for Body Area Networks", *The Computer Journal*, vol. 57, no. 10, pp. 1484- 1512, Oxford University Press, DOI: 10.1093/comjnl/bxt077, October 2014.
 25. B. Amro, Y. Saygın and A. Levi, "Enhancing Privacy in Collaborative Traffic-Monitoring Systems using Autonomous Location Update", *IET Intelligent Transport Systems*, vol. 7, no. 4, pp. 388 – 395, December 2013, DOI: 10.1049/iet-its.2011.0212.
 26. S. Kardas, S. Celik, M. Sariyuce and Albert Levi, "An Efficient and Private Authentication Protocol for RFID Systems", *Journal of Communications Software and Systems*, vol. 9, no. 2, pp. 128 - 136, June 2013.
 27. S. Kardaş, S. Çelik, M. Yıldız and A. Levi, "PUF-enhanced Offline RFID Security and Privacy", *Journal of Network and Computer Applications*, vol. 35, no. 6, pp. 2059–2067, Elsevier, November 2012.
 28. M. Ergun, A. Levi, and E. Savaş, "Increasing Resiliency in Multi-Phase Wireless Sensor Networks: Generationwise Key Predistribution Approach", *The Computer Journal*, vol. 54, no. 4, pp. 602-616, Oxford University Press, April 2011.
 29. C. Yıldızlı, T. B. Pedersen, Y. Saygın, E. Savaş and A. Levi, "Distributed Privacy Preserving Clustering via Homomorphic Secret Sharing and Its Application to (Vertically) Partitioned Spatio-Temporal Data", *International Journal of Data Warehousing and Mining*, vol. 7, no. 1, pp. 46 – 66, 2011.
 30. A. Levi, S. E. Taşçı, Young J. Lee, Yong J. Lee, E. Bayramođlu and M. Ergun, "Simple, Extensible and Flexible Random Key Predistribution Schemes for Wireless Sensor Networks using Reusable Key Pools", *Journal of Intelligent Manufacturing (Springer)*, vol. 21, no. 5, pp. 635 – 645, October 2010.
 31. H. Bahşı and A. Levi, "Data Collection Framework for Energy Efficient Privacy Preservation in Wireless Sensor Networks Having Many-to-Many Structures", *Sensors*, vol.10, no.9, pp. 8375-8397, September 2010.
 32. A. Ünlü and A. Levi, "Two-Tier, Scalable and Highly Resilient Key Predistribution Scheme for Location-Aware Wireless Sensor Network Deployments", *Mobile Networks and Applications*, vol. 15, no. 4, pp. 517 – 529, August 2010.
 33. H. Bahşı and A. Levi, "k-Anonymity based Framework for Privacy Preserving Data Collection in Wireless Sensor Networks", *Turkish Journal of Electrical Engineering and Computer Sciences*, vol. 18, no. 2, pp. 241 – 271, March 2010.
 34. A. Levi and C. B. Güder, "Understanding the limitations of S/MIME digital signatures for e-mails: A GUI based approach", *Computers & Security (Elsevier)*, vol. 28, no. 3-4, May-June 2009, pp. 105 - 120.
 35. S. V. Kaya, E. Savaş, A. Levi, and Ö. Erçetin, "Public key cryptography based privacy preserving multi-context RFID infrastructure", *Ad Hoc Networks (Elsevier)*, vol. 7, no. 1, January 2009, pp. 136 – 152.
 36. Ö. Z. Yılmaz, A. Levi, E. Savaş, "Achieving Fast Self Healing in Wireless Sensor Networks Using Multi-generation Deployment Schemes", *e-Business and Telecommunications - ICETE 2008, CCIS 48*, pp. 180–198, J. Filipe and M.S. Obaidat (Eds.), Springer-Verlag, 2009.
 37. A. Inan, S. V. Kaya, Y. Saygın, E. Savaş, A. A. Hintoglu, and A. Levi, "Privacy Preserving Clustering On Horizontally Partitioned Data," *Data & Knowledge Engineering (Elsevier)*, vol.63, no.3, pp. 646-666, December 2007.
 38. V. Coşkun, E. Çayırıcı, A. Levi, and S. Sancak, "Quarantine Region Scheme to Mitigate Spam Attacks in Wireless Sensor Networks", *IEEE Transactions on Mobile Computing*, vol. 5, no. 8, pp. 1074 – 1086, August 2006.
 39. A. Levi, "Digital Certificates", *The Handbook of Information Security*, ed. H. Bidgoli, vol. 1, pp. 823 – 835, Wiley, 2006.
 40. A. Levi, M. U. Caglayan and C. K. Koc, "Use of nested certificates for efficient, dynamic and trust preserving public key infrastructure", *ACM TISSEC Transactions on Information and System Security*, vol. 7, no. 1, pp. 21 – 59, February 2004.
 41. A. Levi, "How Secure Is Secure Web Browsing", *Communications of the ACM*, 46(7), 152-152, July 2003.
 42. A. Levi and C. K. Koc, "Risks in email security", *Communications of the ACM*, 44(8):112-112, August 2001.
 43. C. Ersoy, A. Levi and O. Gümrah, "Artificial Intelligence Search Techniques for Discrete Link Capacity Assignment in Prioritized Multiservice Networks," *International Journal of Computer System Science and Engineering*, vol. 15, no. 3, pp. 191 – 197, May 2000.

44. A. Levi, M. U. Caglayan, "Analytical Performance Evaluation of Nested Certificates," *Performance Evaluation*, vol. 36-37, pp. 213 - 232, August 1999.

Refereed Conference Papers

45. A. Kasif, C. Togay and A. Levi, "Securing Internet of Things Networks with Gateways and Multi-SSID Technology," 2021 International Balkan Conference on Communications and Networking (BalkanCom), 2021, pp. 45-50, doi: 10.1109/BalkanCom53780.2021.9593270.
46. M. Pekey, Y. D. Çelebi, C. Anıl and A. Levi, "Private Information Inference of Households from Electricity Consumption Data," 2021 International Balkan Conference on Communications and Networking (BalkanCom), 2021, pp. 166-170, doi: 10.1109/BalkanCom53780.2021.9593161.
47. F. K. Örs, M. Aydın, A. Boğatarkan and A. Levi, "Scalable Wi-Fi Intrusion Detection for IoT Systems," 2021 11th IFIP International Conference on New Technologies, Mobility and Security (NTMS), 2021, pp. 1-6, doi: 10.1109/NTMS49979.2021.9432662.
48. A. Kjamiłji, A. Levi, E. Savaş and O. B. Güney, "Secure Matrix Operations for Machine Learning Classifications Over Encrypted Data in Post Quantum Industrial IoT," 2021 International Symposium on Networks, Computers and Communications (ISNCC), 2021, pp. 1-8, doi: 10.1109/ISNCC52172.2021.9615794.
49. S. Gur, S. Demir, S. Simsek and A. Levi, "Secure and Privacy-Aware Gateway for Home Automation Systems", In 13th International Conference on Security of Information and Networks (SIN 2020), November 04-07, 2020, Turkey. ACM, New York, NY, USA, 10 pages. doi: 10.1145/3433174.3433176.
50. N. M. Tülek, M. Kuşkon, İ. Sezgin and A. Levi, "Disclosure of Personal Information in Passwords on Social Media", 2020 28th Signal Processing and Communications Applications Conference (SIU), Gaziantep, Turkey, Oct. 2020, pp. 1-4, doi: 10.1109/SIU49456.2020.9302085.
51. B. Seymen, D. Karaoğlan Altop and A. Levi, "Augmented Randomness for Secure Key Agreement using Physiological Signals", 2020 IEEE Conference on Communications and Network Security (CNS), Avignon, France, 29 June-1 July 2020, pp. 1-9, doi: 10.1109/CNS48642.2020.9162286.
52. A. F. Okuyucu, C. Karataş, A. Levi, and Ö. Gürbüz, "Performance of Load Balancing Algorithms for SDN Controlled Data Center Networks with Leaf-Spine Topology", In Proceedings of Third International Balkan Conference on Communications and Networking (BalkanCom 2019), June 2019.
53. L. Eskandarian, D. Akdoğan, D. Karaoğlan Altop, and A. Levi, "SKA-CaNPT: Secure Key Agreement using Cancelable and Noninvertible Biometrics based on Periodic Transformation", In Proceedings of the Ninth ACM Conference on Data and Application Security and Privacy (CODASPY '19). ACM, New York, NY, USA, pp. 351-362, March 2019, DOI:10.1145/3292006.3300037
54. H. Alptekin, C. Yildizli, E. Savas and A. Levi, "TRAPDROID: Bare-Metal Android Malware Behavior Analysis Framework," 2019 21st International Conference on Advanced Communication Technology (ICACT), PyeongChang Kwangwoon_Do, Korea (South), Feb. 2019, pp. 664-671, DOI: 10.23919/ICACT.2019.8702030.
55. D. Akdoğan, D. Karaoğlan Altop and A. Levi, "On the use of ordered biometric features for secure key agreement", In Proceedings of Second International Balkan Conference on Communications and Networking (BalkanCom 2018), June 2018.
56. Ö. M. Candan, A. Levi and C. Togay, "Generating one-time keys for secure multimedia communication", in Proceedings of 2018 IEEE International Conference on Communications Workshops (ICC Workshops), Kansas City, MO, 2018, pp. 1-6. DOI: 10.1109/ICCW.2018.8403554.
57. D. Karaoğlan Altop, A. Levi and V. Tuzcu, "SU-PhysioDB: a physiological signals database for body area network security", in proceedings of IEEE International Black Sea Conference on Communications and Networking (IEEE BlackSeaCom 2017), Istanbul, Turkey, June 2017.
58. Ö. M. Candan and A. Levi, "Robust two-factor smart card authentication", in proceedings of IEEE International Black Sea Conference on Communications and Networking (IEEE BlackSeaCom 2017), Istanbul, Turkey, June 2017.
59. D. Karaoğlan Altop, A. Levi and V. Tuzcu, "Feature-level fusion of physiological parameters to be used as cryptographic keys", IEEE International Conference on Communications (ICC 2017), pp. 1 - 6, Paris, France, May 2017.
60. C. Toğay and A. Levi, "WebRTC based augmented secure communication - WebRTC tabanlı artırılmış güvenli iletişim", in 24th Signal Processing and Communications Applications Conference (SIU 2016), pp. 1621-1624, DOI: 10.1109/SIU.2016.7496066, May 2016.
61. D. Akdoğan, D. Karaoğlan Altop and A. Levi, "Secure Key Agreement using Pure Biometrics", In Proceedings of 2015 IEEE Conference on Communications and Network Security (CNS), September 2015.
62. D. Karaoğlan Altop, A. Levi and V. Tuzcu, "Towards Using Physiological Signals as Cryptographic Keys in Body Area Networks", in Proceedings of 9th International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth 2015), DOI: 10.4108/icst.pervasivehealth.2015.260074, Istanbul, Turkey, May 2015.
63. N. A. Pular, D. Karaoğlan Altop and A. Levi, " A Role and Activity Based Access Control for Secure Healthcare Systems", In Proceedings of ISCIS 2015 - 30th International Symposium on Computer and Information Sciences, Lecture Notes in Electrical Engineering Volume 363, pp 93-103, Springer, London, UK, September 2015.

64. E. Egemen, A. E. Inal and A. Levi, "İzin verileri kullanılarak mobil kötücül yazılımların sınıflandırılması - Mobile malware classification based on permission data," in 23rd Signal Processing and Communications Applications Conference (SIU 2015), pp.1529-1532, DOI: 10.1109/SIU.2015.7130137, 16-19 May 2015.
65. S. Kardaş, S. Çelik, M. A. Bingöl and A. Levi, "A New Security and Privacy Framework for RFID In Cloud Computing", In Proceedings of 5th IEEE International Conference on Cloud Computing Technology and Science (IEEE CloudCom 2013), pp. 171-176, Bristol, UK, Dec. 2-5, 2013, doi: 10.1109/CloudCom.2013.30.
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69. S. Sarımurat and A. Levi, " HaG: Hash Graph Based Key Predistribution Scheme for Multiphase Wireless Sensor Networks", In Proceedings of IEEE ICC 2013 - IEEE International Conference on Communications, Communication and Information Systems Security Symposium, pp. 672 - 676, Budapest, Hungary, June 2013.
70. S. Kardaş, S. Çelik, A. Arslan and A. Levi, "An Efficient and Private RFID Authentication Protocol Supporting Ownership Transfer", in G. Avoine, O. Kara (Eds.): Lightweight Cryptography for Security and Privacy - Second International Workshop, LightSec 2013, Gebze, Turkey, May 6-7, 2013. Springer LNCS 8162, 2013, pp. 130 - 141
71. A. O. Durahim, I. F. Yıldırım, E. Savaş and A. Levi, "Performance Evaluation of Different CRL Distribution Schemes Embedded in WMN Authentication", In Proceedings of ISCIS 2012 - 27th International Symposium on Computer and Information Sciences, pp. 333 – 342, Springer, Paris, France, October 2012.
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80. B. Amro, Y. Saygın and A. Levi, "P2-CTM: Privacy Preserving Collaborative Traffic Monitoring", In Proceedings of SPRINGL'10 - The 3rd ACM SIGSPATIAL International Workshop on Security and Privacy in GIS and LBS, pp. 55 – 59, 2 November 2010, San Jose, CA, USA.
81. D. Karaoğlu, A. Levi and E. Savaş, "A Distributed Key Establishment Scheme for Wireless Mesh Networks using Identity-Based Cryptography", In Proceedings of ACM Q2SWinet 2010 - The 6th ACM International Symposium on QoS and Security for Wireless and Mobile Networks, pp. 11 – 18, October 17–18, 2010, Bodrum, Turkey.
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84. H. Bahşi and A. Levi, "Energy Efficient Privacy Preserved Data Gathering in Wireless Sensor Networks Having Multiple Sinks", CSA 2009 - 2nd International Conference on Computer Science and its Applications, December 10 – 12, 2009, Jeju, Korea.

85. K. Kalkan, S. Yılmaz, Ö. Z. Yılmaz and A. Levi, "A Highly Resilient and Zone-based Key Predistribution Protocol for Multiphase Wireless Sensor Networks", ACM Q2SWinet 2009 - The 5th ACM International Symposium on QoS and Security for Wireless and Mobile Networks, October 28–29, 2009, Tenerife, Canary Islands, Spain.
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