

CURRICULUM VITAE

PERSONAL DETAILS

First Name Gürcü
Last Name Öz
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Eastern Mediterranean University
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ACADEMIC QUALIFICATION

PhD, Computer Engineering, Eastern Mediterranean University, 2001
MS, Electrical and Electronic Engineering, Eastern Mediterranean University, 1996
BS, Electrical and Electronic Engineering, Eastern Mediterranean University, 1993.

WORK AND TEACHING EXPERIENCE

- Professor, Computer Engineering department, Eastern Mediterranean University, 1 August 2025 – present.
- Associate Professor, Computer Engineering department, Eastern Mediterranean University, 2016 – 31 July 2025.
- Assistant Professor, Department of Computer Engineering, Eastern Mediterranean University, 2001 – 2016.
- Research Assistant, Department of Computer Engineering, Eastern Mediterranean University, 1996 – 2001.
- Research Assistant, Department of Electrical and Electronic Engineering, Eastern Mediterranean University, 1994 – 1996.

COURSES TAUGHT

CMPE541 Networks and Distributed Systems
CMPE576 Advanced System Simulation
CMPE/CMSE405-CMPE/CMSE406 Graduating Projects
CMPE445 Internet Architecture and Protocols
CMPE455 Security of Computer Systems and Networks
CMPE344 Computer Networks

CMPE343 Systems Programming
CMPE318 Programming Languages
CMPE211 Object Oriented programming
CMPE242 Operating Systems
CMPE231 Data Structures
CMPE112 Programming Fundamentals
CMPE108 Algorithms and Programming
CMPE107 Foundations of Computer Engineering
BLGM405-BLGM406 Mezuniyet Projesi
BLGM445 Internet Mimarisi ve Protokolleri
BLGM455 Bilgisayar Sistemleri ve Ağ Güvenliği
BLGM343 Sistem Programlama
BLGM344 Bilgisayar Ağları
BLGM108 Algoritmalar ve Programlama

RESEARCH INTEREST

Computer Networks
Distributed Systems
Advanced System Simulations
Wireless Networks
Cloud Computing
Network Security
Information Security

PROJECTS

Performance Evaluation of an Efficient Reconfigurable Routing for Multicasting Data Delivery in Ad Hoc Networks , BAP-A-07-08, June 2007 – October 2008.

Methods, Models and Algorithms of Dissemination of Information in Wireless Mobile Ad Hoc Networks, BAP-A-08-10, October 2009 - March 2011.

PUBLICATIONS

Journal Publications

SCI-Expanded Publications

1. Alexander G. Chefranov, Gürcü Öz, Remainder with Threshold Substitution Data Hiding Scheme: Counterexamples and Modification, IEEE Latin America Transactions, 21 (12), pp.1255-1265, 2023.

2. Gürcü Öz, A Flooding Mechanism of Stateless Anycast Routing in Mobile Wireless Ad Hoc Networks, *Ad Hoc & Sensor Wireless Networks*, 55 (1-2), pp.123-149, 2023.
3. Alexander G. Chefranov, Gürcü Öz, Adaptive to pixel value and pixel value difference irreversible spatial data hiding method using modified LSB for grayscale images, *Journal of Information Security and Applications*, 70 (10331), 2022. <https://doi.org/10.1016/j.jisa.2022.103314>
4. Alexander G. Chefranov, Gurcu Oz, On LSB, LSB OPAP, and LSB OOPAP Published Experimental Results Correctness, *Iranian Journal of Science and Technology, Transactions of Electrical Engineering*, 6(2), pp. 609-619, 2022.
5. Loiy Alsbatin, Gürcü Öz and Ali Hakan Ulusoy, A Novel Physical Machine Overload Detection Algorithm Combined with Queiscing for Dynamic Virtual Machine Consolidation in Cloud Data Centers, *International Arab Journal of Information Technology*, 17(3), May 2020.
6. Loiy Alsbatin, Gürcü Öz and Ali Hakan Ulusoy, Efficient Virtual Machine Placement Algorithms for Consolidation in Cloud Data Centers, *Computer Science and Information Systems*, 17(1), 29-50, 2020, <https://doi.org/10.2298/CSIS>.
7. Farhat Alusta, Gürcü Öz and Ali Hakan Ulusoy, Investigation of Delay Tolerant Network Routing Protocols with Energy Consumption Analysis, *Ad Hoc & Sensor Wireless Networks*, 46(1-2), pp. 53-82, 2020.
8. A. Kostin, G. Oz and . Haci, A Restricted Flooding Mechanism for Efficient Anycast Server Localization in MANETs, *Wireless Networks*, 21(5), pp. 1603-1612, July 2015.
9. A. Kostin, G. Oz and H. Haci, Performance Study of a Wireless Mobile Ad Hoc Network with Orientation-dependent Inter-node Communication Scheme, *International Journal of Communication Systems*, 27(322-340), 2014.
10. A. K. Abed, G. Oz and I. Aybay, Influence of Mobility Models on the Performance of Data Dissemination and Routing in Wireless Mobile Ad Hoc Networks, *Computers and Electrical Engineering*, 40(319-329), 2014.
11. A. E. Kostin, I. Aybay, and G.Oz, A Randomized Contention-Based Load Balancing Protocol for a Distributed Multiserver Queuing System, *IEEE Transactions on Parallel and Distributed Systems*, 11(12), , pp.1252 – 1273, December 2000.

Reviewed Journals

1. Ali Esfandiar, Gürcü Öz, Performance Analysis of D2D Communication over LTE-A Network with Mode Switching, *International Journal of Innovation in Computer Science and Information Technology*, 1 (2), pp.79 – 91, 2019
2. S. M. Klimi, G. Oz, A. A. Emmanuel, Investigation of Security Aspect of Cloud Computing, *International Journal of Scientific Technology and Journal Research*, 3(4), pp. 0647-0656, 2014.

International Conference Publications

1. Behnam Shahriari, Gürcü Öz and Ali Hakan Ulusoy, "A Comprehensive Evaluation of Security Issues in 5G Networks and M2M Systems", Proceedings of International Conference on Communications and Network Engineering (ICCNE'25), İstanbul, Turkey, 1-2 May 2025.
2. Shiva Derogar Khachekini, Gürcü Öz, Ali Hakan Ulusoy, "A Comprehensive Overview of Mobility Prediction Mechanisms, Models and Architecture", Proceedings of International Conference on Engineering Technologies (ICENTE'24), Konya, Turkey, 21-23 November 2024.
3. Loiy Alsbatin, Gürcü Öz, and Ali Hakan Ulusoy, "An overview of energy-efficient cloud data centres," in Proceedings of the International Conference of computer and applications, Dubai, United Arab Emirates, 2017, pp. 211- 214
4. Abdul Karim Abed, Gurcu. Oz, "Experimental Study of Pure Flooding Method for Localizing an Anycast Server in Wireless Ad Hoc Networks", Palestinian International Conference on Information and Communication Technology (PICICT'2013), Gaza, 2013, pp. 83-89.
5. Reza Shokri Kalan, Gurcu Oz, Parnaveh Shams, "Energy Consumption Management in Data Center Using Virtualization", in the International Conference on Networking and Future Internet(ICNFI 2012), Istanbul, 2012, pp.46-52.
6. Reza Azizi and Gurcu Oz, "Performance Evaluation of Data Dissemination in Real-World Ad Hoc Networks", in the International Conference on Communications and Information Technology (ICCIT2011), Agaba, March 2011, pp. 176 - 179.
7. Abdul Karim Abed, Gurcu Oz and Mustafa Akkoc, "Performance Evaluation of Real-World Wireless Mobile Ad hoc Networks", in 6th International Architecture & Engineering Symposium, Electrical and Electronics Engineering and Computer Systems (EEECS'10), Lefke, November 2010, pp. 102-107.
8. Abdul Karim Abed, Mehmet Komili and Gurcu Oz, "Experimental Study of Data Dissemination" in 12th International Workshop on Computer Science and Information Technologies (CSIT2010), Russia, September 2010, pp. 125-132.
9. Gurcu Oz, Abdul Karim Abed, Yağız Özen, "Application-Layer Testbed for Real-World Experimentation in Wireless Ad Hoc Networks", in 10th International Workshop on Computer Science and Information Technologies CSIT2009, October 2009, pp. 27-31.

10. Gurcu Oz, Yağız Özen, "Experimental Investigation of Data Transmission in Wireless Ad Hoc Networks" 5th International Conference on Soft Computing, Computing with Words and Perceptions in System Analysis, Decision and Control (ICSCCW2009), Gazimagusa, Northern Cyprus, September 2009, pp.79-82.
11. Alexander Kostin, Gurcu Oz, and Huseyin Haci, "Performance Study of a Wireless Ad Hoc Network with Orientation-Dependent Inter-Node Communication Links," Proceeding of 24th International Symposium on Computer and Information Sciences (ISCIS 2009), METU North Cyprus Campus, Sep. 14 - 16, 2009, IEEE Publ., pp. 326 - 331.
12. Gurcu Oz, Alexander Kostin, Abosede Marry Oyeniyi, Zahra Sharghi, Sepideh Seifzadeh, "Prototype Application-Layer Test Bed for Implementation and Investigation of Routing and Data Dissemination in Wireless Mobile Ad Hoc Networks", in 10th International Workshop on Computer Science and Information Technologies CSIT2008, September 2008, pp. 27-31.
13. Alexander Kostin, Gurcu Oz, Zahra Sharghi, and Abosede Marry Oyeniyi, "Generic Petri-Net-Based Model to Study Data Dissemination in Mobile Wireless Ad Hoc Networks," Proceeding of the 8th International Symposium on Computer Networks (ISCN 2008), Istanbul, Turkey, June 18 - 20, 2008, pp. 126 - 131.
14. Abdul Karim Abed, Gurcu Oz, and Alexander Kostin, "Competition_Based Load Balancing for Distributed Systems", in 7th IEEE International Symposium on Computer Networks, IEEE ISCN 2006, Bogazici University, Istanbul Turkey, 16 - 18 June 2006pp. 230-235.
15. Alexander Kostin, and Gurcu Oz, A Fault-Tolerant Load-Balancing Protocol for Distributed Multiserver Queuing Systems, in Proceedings of the Eight IEEE Symposium on Computers and Communication, ISCC 2003, IEEE Press, 30 June 2003, pp. 1201 - 1206.
16. Alexander Kostin, Isik Aybay, and Gurcu Oz, A Simple and Efficient Protocol of Load Balancing in Distributed Multiserver Queuing Systems, Proc. of 17th International Conf. On Applied Informatics IASTED AI'99, Innsbruck, Austria, February 15 - 18, 1999, Acta Press, pp. 474 - 476.
17. Alexander Kostin, Isik Aybay, and Gurcu Oz, A Paradigm of Alternating Sequential/Parallel Computation in a Distributed-Memory System over a Shared Transmission Media, In: Advances in Computer and Information Sciences '98, Proc. of the 13th International Symposium on Computer and Information Sciences ISCIS '98, 26 - 28 Oct. 1998, Belek-Antalya, Turkey, IOS Press, Amsterdam, 1998, pp. 342 - 351.

Book Chapters

1. Shiva Derogar Khachekini, Gürcü Öz, Ali Hakan Ulusoy, "A Comprehensive Overview of Mobility Prediction Mechanisms, Models and Architecture", In: Nurettin Doğan, Selahattin Alan, Züleyha Yılmaz Acar (eds) Innovative Approaches in Applied Engineering Fields. Selcuk University Press, ISBN: 978-975-448-246-1, 34-55, doi: 10.59726/SUPress/9789754482461.

THESIS SUPERVISION

PhD

1. A. K. Abed, Mobility Models and Efficient Multihop Routing Methods in MANETs, EMU, 2013
2. L. Alsbatin, Energy-Efficient Management for Dynamic Consolidation of Virtual Machines in Cloud Data Centers under QoS Constraints, EMU, 2019

MS

1. A. M. Oyeniyi, Performance Evaluation of Ad Hoc Wireless Networks, EMU, 2009
2. Y. Ozen, Performance Study of Real-World Wireless Mobile Ad Hoc Networks, EMU, 2010
3. R. Azizi, Design and Implementation of an AnyCast Protocol for Wireless Mobile Ad Hoc Networks, EMU, 2011
4. A. Okoli, Investigation of the Effect of Mobility Models on Proactive and Reactive Routing Protocols in Mobile Ad Hoc Networks, EMU, 2012
5. M. Roshanasan, Performance Evaluation of Routing Protocols in Wireless Mobile Ad Hoc Networks (MANETs) using OPNET Simulator, EMU, 2012
6. A. A. Abdullahman, Performance Analysis and Comparison of Ad Hoc Routing Protocols AODV and OLSR on Video Conferencing using OPNET Simulator, EMU, 2013
7. O. Y. Fadhil, Performance Evaluation of AODV and DSR Routing Protocols with PCM and GSM Voice Encoding Schemes, EMU, 2013
8. R. A. Vaighan, Investigation Performance of Strassen Matrix Multiplication Algorithm of Distributed Systems. EMU, 2013

9. M. D. Khorsheed, Investigate Performance of 802.11b and 802.11g Standards with DSR Protocol using OPNET, EMU, 2013
10. A. J. Qasim, Performance Evaluation of Wireless Standards 802.11g and 802.11b on HTTP Application over AODV Protocol using OPNET, EMU, 2013
11. H. M. Jasim, Investigate Performance of IEEE 802.11b Using OPNET, EMU, 2013
12. S. M. Klim, Investigation of Security Aspects of Cloud Computing, EMU, 2014
13. A. N. Mahmood, Coverage Area and Capacity Evaluation for WiMAX Networks, EMU, 2014
14. A. Ashkzari, Modelling and Optimizing RFID Network Planning by using Genetic Algorithms as a Computational Intelligent Technique, EMU, 2014
15. P. P. Davani, U-shaped Assembly Line Balancing with Grouping Evolution Strategy (GES), EMU, 2015
16. M. K. Ghamsari, Android Service Security: Victimized Android Device by Transferring Malicious Service via Near Field Communication Using Social Engineering, EMU, 2015
17. S. Mazaheri, Network Monitoring System, EMU, 2015
18. T. A. Ayoku, Implementation and Performance Analysis of Black Hole Attacks on AODV in MANETs, EMU, 2015
19. E. A. Ailemen, Implementation and Performance Evaluation of Black Hole Attacks on DSR and AODV in MANETs, EMU, 2016
20. O. E. M. Lamiles, Analysis and Experimental Study of EMD and GEMD Steganographic Methods, EMU, 2016
21. H. A. Alaswed, Analysis and Experiments of LSB-Based and ATD Steganographic Methods for Gray Scale and Color Images, EMU, 2017
22. M. Algeiwan, Performance Analysis of the Well-Known DTN Routing Protocols, EMU, 2017
23. N. F. Hamad, Reversible Data Hiding in Encrypted Images with Distributed Source Encoding: Implementation and Experiments, EMU, 2018
24. F. M. H. Alusta, Investigation of Delay Tolerant Network Routing Protocols with Energy Consumption Analysis, EMU, 2018

25. A. Esfandiar, Performance Analysis of D2D Communication over LTE-A Network with Mode Switching, EMU, 2019
26. M. A. Suleiman, Performance Investigation of Video Streaming over mmWave, EMU, 2021

Professional Societies

Member, Electrical Engineers Chamber of North Cyprus, 1994- .

Member, EMU Faculty Union (DAU-SEN), 2004 - .

Member, Othello Polyphonic Choir, Famagusta, North Cyprus, 2017-

Journal Refereeing

International Journal of Communication Systems

IEEE Transactions on Industrial Electronics

Service activities (within and outside of the institution)

Faculty Promotion Committee Chair

Department Committees: Promotion Committee, Summer Training Committee, Graduate Committee, ABET Industrial Advisory Board Committee, Surveys Committee, Graduation Projects Committee

EMU Information security committee member