

Dr. Turgay Korkmaz
Associate Professor
The University of Texas at San Antonio

Department of Computer Science
College of Sciences
The University of Texas at San Antonio
One UTSA Circle
San Antonio, TX 78249

Work Phone: (210) 458-7346
Email: korkmaz@cs.utsa.edu
Web Address: www.cs.utsa.edu

Education

Doctor of Philosophy, Electrical and Computer Engineering, University of Arizona
Dissertation Title: QoS routing in packet networks

Master of Science, Computer and Information Science, Syracuse University

Master of Science, Computer Engineering and Information Sciences, Bilkent University
Thesis Title: Turkish Text Generation With Systemic-Functional Grammar

Bachelor of Science, Computer Sciences and Engineering, Hacettepe University

Academic Positions

- | | |
|----------------|---|
| 2008 - Present | Associate Professor, The Department of Computer Science, The University of Texas at San Antonio |
| 2002 - 2008 | Assistant Professor, The Department of Computer Science, The University of Texas at San Antonio |
| 1998 - 2001 | Graduate Research Assistant, Electrical & Computer Engineering, University of Arizona |
| 1994 - 1996 | Graduate Research/Teaching Assistant, Computer Engineering and Information Sciences, Bilkent University |

Research Interests

Computer networks, Quality-of-Services (QoS) issues in both wireline and wireless networks, Network Security, Wireless Sensor Networks, Routing algorithms and protocols, Network performance evaluation, Graph mining.

SCHOLARSHIP/RESEARCH/CREATIVE WORKS

Intellectual Contributions

Journal Article, Academic Journal - Peer-Reviewed/Refereed

30. Wichmann, A., Korkmaz, T., & Tosun, A. S. Robot Control Strategies for Task Allocation with Connectivity Constraints in WSRNs. *IEEE Transactions on Networking*. (Submitted)

2016

29. Yu, X., Lilburn, T., Cai, H., Gu, J., Korkmaz, T., & Wang, Y. PageRank influence analysis of protein-protein association networks in the malaria parasite *Plasmodium falciparum*. *To appear in International Journal of Computational Biology and Drug Design*, 1-20.
www.inderscience.com/info/ingeneral/forthcoming.php?jcode=ijcbdd (In Press)

2015

28. Wichmann, A., & Korkmaz, T. (2015). Smooth Path Construction and Adjustment for Multiple Mobile Sinks in Wireless Sensor Networks. *Computer Communications*, 72, 93-106.
www.sciencedirect.com/science/article/pii/S0140366415002157
27. Yu, X., Korkmaz, T., Lilburn, T., Cai, H., Gu, J., & Wang, Y. (2015). Heavy path mining of protein-protein associations in the malaria parasite. *Methods*, 83, 63-70.
<http://www.sciencedirect.com/science/article/pii/S1046202315001486>
26. Yu, X., & Korkmaz, T. (2015). Heavy path based super-sequence frequent pattern mining on web log dataset. *Artificial Intelligence Research*, 1-12.
<http://dx.doi.org/10.5430/air.v4n2p1>
25. Yu, X., & Korkmaz, T. (2015). Hypergraph querying using structural indexing and layer-related-closure verification. *Knowledge and Information Systems*, 1-29.
<http://dx.doi.org/10.1007/s10115-015-0829-4>

2014

24. Feng, G., & Korkmaz, T. (2014). Finding Multi-constrained Multiple Shortest Paths. *IEEE Transactions on Computers*, PP(99), 1-14.
23. Wichmann, A., Demirelli Okkalioglu, B., & Korkmaz, T. (2014). The integration of mobile (tele) robotics and wireless sensor networks: A survey. *Computer Communications*, 51, 21-35.
<http://www.sciencedirect.com/science/article/pii/S0140366414002266>

2013

22. Feng, G., & Korkmaz, T. (2013). A Fast Hybrid epsilon-Approximation Algorithm for Computing Constrained Shortest Paths. *IEEE Communications Letters*, 17(7), 1471 - 1474.

2012

21. Akbani, R., Korkmaz, T., & Raju, G.V.S. (2012). EMLTrust: An Enhanced Machine Learning Based Reputation System. *Ad Hoc Networks*, 10, 435–457.
20. Zinsmeyer, C. J., & Korkmaz, T. (2012). A Comparative Review of Connectivity Based Wireless Sensor Localization. *Journal of Internet Services and Information Security (JISIS)*, 2(1/2), 59-72.

2011

19. Akbani, R., & Korkmaz, T. (2011). Enhancing Role Based Trust Management with a Reputation System for MANETs. *EURASIP Journal on Wireless Communications and Networking*, 90, 1-14.
18. Korkmaz, T., & Tek, S. (2011). Analyzing Response Time of Batch Signing. *Journal of Internet Services and Information Security (JISIS)*, 1(1), 70-85.

2010

17. Cui, Y., Zhao, Y., Korkmaz, T., & Zhang, T. (2010). Supporting multiple metrics in QoS-aware BGP. *SCIENCE CHINA Information Sciences*, 53(10), 1947-1962.

2008

16. Akbani, R., Korkmaz, T., & Raju, G.V.S. (2008). HEAP: A packet authentication scheme for mobile ad hoc networks. *Ad Hoc Networks*, 6(7), 1134-1150.

2007

15. Gunes, M. H., Bilir, S., Sarac, K., & Korkmaz, T. (2007). A Measurement Study on Overhead Distribution of Value-Added Internet Services. *Computer Networks (COMNET) Journal*, 51, 4153-4173.
14. Zheng, Y., Korkmaz, T., & Dou, W. (2007). Two Additive-Constrained Path Selection in the Presence of Inaccurate State Information. *Computer Communications (COMCOM) Journal*, 30, 2096-2112.
13. Korkmaz, T., Gong, C., Sarac, K., & Dykes, S. G. (2007). Single Packet IP Traceback in AS-level Partial Deployment Scenario. *Int. J. Security and Networks*, 2(1/2), 95-108.

2006

12. Zheng, Y., Korkmaz, T., Dou, W., & Tian, J. (2006). Highly Responsive and Efficient QoS Routing Using Pre- and On-demand Computations along with a New Normal Measure. *Computer Networks Journal*, 50(18), 3743-3762.
11. Ahuja, S., Krunz, M., & Korkmaz, T. (2006). Optimal path selection for minimizing the differential delay in Ethernet over SONET. *Computer Networks Journal*, 50(13), 2349-2363.

2005

10. Korkmaz, T. (2005). Verifying Physical Presence of Neighbors against Replay-based Attacks in Wireless Ad Hoc Networks. *International Journal of Information Technology (IJIT)*, 11(2), 5--17.

2004

9. Kuipers, F., Korkmaz, T., Krunz, M., & Van Mieghem, P. (2004). Performance Evaluation of Constraint-Based Path Selection Algorithms. *18*(5), 16-23.
8. Korkmaz, T., Krunz, M., & Guntaka, J. (2004). OSPF-Based Hybrid Approach for Scalable Dissemination of QoS Parameters. *Computer Networks Journal*, *46*(2), 273-293.

2003

7. Korkmaz, T., & Krunz, M. (2003). Routing multimedia traffic with QoS guarantees. *IEEE Transactions on Multimedia*, *5*(3), 429-443.
6. Korkmaz, T., & Krunz, M. (2003). Bandwidth-Delay Constrained Path Selection Under Inaccurate State Information. *IEEE/ACM Transactions on Networking (ToN)*, *11*(3), 384-398.

2002

5. Kuipers, F., Korkmaz, T., Krunz, M., & Van Mieghem, P. (2002). An Overview of Constraint-Based Path Selection Algorithms for QoS Routing. *IEEE Communications Magazine, special issue on IP-Oriented Quality of Service*, *40*(12), 50-55.
4. Korkmaz, T., Krunz, M., & Tragoudas, S. (2002). An efficient algorithm for finding a path subject to two additive constraints. *Computer Communications Journal*, *25*(3), 225-238.

2001

3. Korkmaz, T., & Krunz, M. (2001). A randomized algorithm for finding a path subject to multiple QoS requirements. *Computer Networks Journal*, *36*(2-3), 251-268.

2000

2. Korkmaz, T., & Krunz, M. (2000). Source-oriented topology aggregation with multiple QoS parameters in hierarchical networks. *ACM Transactions on Modeling and Computer Simulation (TOMACS)*, *10*(4), 295-325.

1996

1. Korkmaz, T., & Cicekli, I. (1996). Generation of Turkish Verbal Groups with Systemic-Functional Grammar. *ELEKTRIK, Turkish Journal of Electrical Engineering and Computer Sciences*, *4*, 78-88.

Conference Proceeding - Peer-Reviewed/Refereed

2017

46. Akin, E., & Korkmaz, T. (2017). An Efficient Binary-Search Based Heuristic for Extended Unsplittable Flow Problem. (pp. 1-6). IEEE ICNC'17, Workshop on Computing, Networking and Communications (CNC).
45. Akin, E., & Korkmaz, T. (2017). Routing Algorithm for Multiple Unsplittable Flows Between Two Cloud Sites with QoS Guarantees. (pp. 1-7). IEEE ICNC'17,

Workshop on Computing, Networking and Communications (CNC).

2016

44. Yu, X., Zhang, H., Lilburn, T., Cai, H., Gu, J., Korkmaz, T., & Wang, Y. (2016). Just-in-time expression of influential genes in the cellular networks of the malaria parasite *Plasmodium falciparum* during the red blood cycle. (pp. 1-6 (acceptance rate 19%)). The IEEE International Conference on Bioinformatics and Biomedicine (BIBM). cci.drexel.edu/ieebibm/bibm2016/

2015

43. Yu, X., Lilburn, T., Cai, H., Gu, J., Korkmaz, T., & Wang, Y. (2015). PageRank influence analysis of protein-protein association networks in the malaria parasite *Plasmodium falciparum*. (pp. 1-34). Indianapolis, IN, USA: ICIBM 2015. watson.compbio.iupui.edu/yunliu/icibm/
42. Wichmann, A., & Korkmaz, T. (2015). Analysis of deployment and movement policies in wireless sensor and robot networks. *IEEE WoWMoM 2015* (pp. 1-9 (acceptance rate 21%)).

2014

41. Wichmann, A., Korkmaz, T., & Tosun, A. S. (2014). Minimum Hop and/or Minimum Distance Robot Movement with Connectivity Constraints in WRSNs. *IEEE Globecom 2014 - Ad Hoc and Sensor Networking Symposium* (pp. 1-7).
40. Yu, X., Korkmaz, T., Lilburn, T., Cai, H., Gu, J., & Wang, Y. (2014). Heavy Path Mining Reveals Novel Protein-Protein Associations in the Malaria Parasite *Plasmodium falciparum*. *IEEE International Conference on Bioinformatics and Biomedicine (BIBM)* (pp. 107-112). (acceptance rate 19%).
39. Yu, X., & Korkmaz, T. (2014). Evident Behavior Analysis on ADLs. *Workshop on Data Science for Social Good, Held in conjunction with KDD 2014* (pp. 1-4). ACM. <http://dssg.uchicago.edu/kddworkshop/papers/you.pdf>
38. Yu, X., & Korkmaz, T. (2014). Finding the Most Evident Co-Clusters on Weblog Dataset Using Frequent Super-Sequence Mining. *IEEE 15th International Conference On Information Reuse And Integration (IRI)* (pp. 529-536). <http://www.pitt.edu/~iri2014/>

2013

37. Yu, X., & Korkmaz, T. (2013). Super-sequence Frequent Pattern Mining on Sequential Dataset. *IEEE International Conference on Big Data* (pp. 52 - 59).
36. Narman, H., Korkmaz, T., & Tek, S. (2013). Utilizing distance distribution in determining topological characteristics of multi-hop wireless networks. *IEEE International Conference on Computing, Networking and Communications (ICNC)* (pp. 149-154). IEEE.

2012

35. Wichmann, A., Chester, J., & Korkmaz, T. (2012). Smooth Path Construction for Data Mule Tours in Wireless Sensor Networks. *IEEE GLOBECOM 2012* (pp. 1-7).

- 34. Akbani, R., Korkmaz, T., & zz Raju, G.V.S. (2012). Mobile Ad-Hoc Networks Security. *Recent Advances in Computer Science and Information Engineering Lecture Notes in Electrical Engineering* (vol. 127, pp. 659-666). Springer.
- 33. Pustchi, N., & Korkmaz, T. (2012). Improving packet reception rate for mobile sinks in wireless sensor networks. *IEEE International Symposium on World of Wireless, Mobile and Multimedia Networks (WoWMoM)* (pp. 1-9).

2011

- 32. Griffin, M., & Korkmaz, T. (2011). Distributed verification of global multiple disjoint paths in mobile wireless networks. *The 7th International Wireless Communications and Mobile Computing Conference (IWCMC)* (pp. 666-670). IEEE.
- 31. Patel, S., Sarac, K., Chandrasekaran, R., Korkmaz, T., & Mittal, N. (2011). Relay Assignment in AMT-Based Multicast Content Distribution. *Ninth Annual Communication Networks and Services Research Conference (CNSR)* (pp. 263-270). IEEE Computer Society Press.

2010

- 30. Korkmaz, T. (2010). Batch Forwarding in Wireless Sensor Networks. *IEEE MILCOM 2010* (pp. 1-9). Sponsored by IEEE, AFCEA.
- 29. Korkmaz, T., & Sarac, K. (2010). Characterizing Link and Path Reliability in Large-Scale Wireless Sensor Networks. *IEEE 6th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob)* (pp. 217 - 224).

2009

- 28. Akbani, R., Korkmaz, T., & Raju, G.V.S. (2009). A Hybrid Trust Management System for Automated Fine-Grained Access Control. *IEEE MILCOM 2009*. Sponsored by Raytheon, IEEE, AFCEA.
- 27. Korkmaz, T. (2009). Analyzing Response Time of Batch Signing. *IEEE ICCCN 2009 Workshop on Security, Privacy and Trust of Computer and Cyber-Physical Networks (SecureCPN)* (pp. 6). San Francisco:.

2008

- 26. Tosun, A., & Korkmaz, T. (2008). PeerGraph: A Distributed Data Structure for Peer-to-peer Streaming. *IEEE Globecom 2008 Communications Software and Services Symposium (GC'08 CSS)* (pp. 1-5). New Orleans, LA: IEEE.
- 25. Akbani, R., Korkmaz, T., & Raju, G. (2008). A Machine Learning Based Reputation System for Defending Against Malicious Node Behavior. *IEEE Globecom 2008 Computer and Communications Network Security Symposium (GC'08 CCNS)* (pp. 5). New Orleans, LA:.
- 24. Akbani, R., Korkmaz, T., & Raju, G. (2008). Defending Against Malicious Nodes Using an SVM Based Reputation System. *IEEE MILCOM 2008* (pp. 8). San Diego, CA:.

2007

23. Zhou, W., & Korkmaz, T. (2007). Lower-Priority-Triggered Distributed MAC-layer Priority Scheduling in Wireless Ad Hoc Networks. *The Third International Workshop on Localized Communication and Topology Protocols for Ad hoc Networks (LOCAN 2007) in conjunction with The 4th IEEE International Conference on Mobile Ad Hoc and Sensor Systems (MASS-2007)* (pp. 7).
22. Akbani, R., Korkmaz, T., & Raju, G. (2007). A Packet Authentication Scheme For Wireless Sensor Networks. *The 22nd International Conference on Computers and their Applications (CATA-2007), Special Session on WSNs* (pp. 401-407).
21. Akbani, R., Korkmaz, T., & Raju, G. (2007). HEAP: Hop-by-hop Efficient Authentication Protocol For Mobile Ad-hoc Networks. *ACM 10th Communications and Networking Simulation Symposium CNS 07* (pp. 157-165). Norfolk, VA:.

2006

20. Korkmaz, T., & Zhou, W. (2006). On Finding Optimal Paths in Multi-radio Multi-hop Mesh Networks using WCETT Metric". *International Wireless Communications and Mobile Computing Conference IWCMC 2006* (pp. 1375-1380). ACM.
19. Zhang, T., Cui, Y., Zhao, Y., Fu, L., & Korkmaz, T. (2006). Scalable BGP QoS Extension with Multiple Metrics. *IEEE International Conference on Networking and Services (ICNS'06)* (pp. 6). Silicon Valley:.

2005

18. Bilir, S., Sarac, K., & Korkmaz, T. (2005). Intersection Characteristics of End-to-End Internet Paths and Trees. *IEEE International Conference on Network Protocols (ICNP '05)* (pp. 10). Boston, MA:.
17. Gong, C., Le, T., Korkmaz, T., & Sarac, K. (2005). Single Packet IP Traceback in AS-level Partial Deployment Scenario. *IEEE Globecom '05* (pp. 5). St. Louis, MO:.
16. Ahuja, S., Krunz, M., & Korkmaz, T. (2005). Optimal Path Selection for Ethernet Over SONET Under Inaccurate Link-State Information. *IEEE BroadNets'05* (vol. 1, pp. 87 - 96). Boston, MA:.
15. Korkmaz, T., & Kaynak, M. N. (2005). Impacts of Channel Reliability on Topology Control in Multi-hop Wireless Networks. *IEEE VTC 2005* (pp. 1697 - 1701). Dallas:.
14. Zheng, Y., Korkmaz, T., & Dou, W. (2005). Highly Responsive and Efficient QoS Routing Using Pre-and On-demand Computations along with a New Normal Measure. *NETWORKING 2005* (pp. 12). University of Waterloo.
13. Zheng, Y., Korkmaz, T., & Dou, W. (2005). Pareto Optimal based Partition Framework for Two Additive Constrained Path Selection. *The IEEE International Conference on Networking (ICN'05)* (pp. 1-8). Reunion Island:.
12. Zheng, Y., Korkmaz, T., & Dou, W. (2005). Two Additive-Constrained Path Selection in the Presence of Inaccurate State Information. *IEEE IEEE The 1st EuroNGI Conference on Next Generation Internet Networks--Traffic Engineering, (NGI 2005)* (pp. 1-8).
11. Korkmaz, T. (2005). Verifying Physical Presence of Neighbors against

Replay-based Attacks in Wireless Ad Hoc Networks. *IEEE ITCC 2005, Wireless Ad Hoc/Sensor Networks and Network Security track* (pp. 704-709). Las Vegas, NV:.

2004

10. Korkmaz, T., & Guntaka, J. (2004). State-path decoupled QoS routing framework. *IEEE GLOBECOM 2004* (vol. 3, pp. 2400 - 2404). Dallas, TX:.
9. Ahuja, S. S., Korkmaz, T., & Krunz, M. (2004). Minimizing the Differential Delay for Virtually Concatenated Ethernet Over SONET Systems. *ICCCN 2004* (pp. 6). Chicago, IL: IEEE.

2002

8. Korkmaz, T., & Krunz, M. (2002). Hybrid Flooding and Tree-based Broadcasting for Reliable and Efficient Link-state Dissemination. *IEEE GLOBECOM 2002, High-Speed Networks Symposium* (vol. 3, pp. 2400-2404).

2001

7. Korkmaz, T., & Krunz, M. (2001). Multi-constrained optimal path selection. *Proceedings of the IEEE INFOCOM 2001 Conference* (vol. 2, pp. 834-843). Anchorage, Alaska:.

2000

6. Korkmaz, T., M. K., & Tragoudas, S. (2000). An efficient algorithm for finding a path subject to two additive constraints. *Proceedings of the ACM SIGMETRICS 2000 Conference* (vol. 1, pp. 318-327). Santa Clara, CA:.

1999

5. Korkmaz, T., & Krunz, M. (1999). A randomized algorithm for finding a path subject to multiple QoS constraints. *Proceedings of the IEEE GLOBECOM '99 Conference - Symposium on Global Internet: Application and Technology* (pp. 1694-1698).
4. Korkmaz, T., & Krunz, M. (1999). Source-oriented topology aggregation with multiple QoS parameters in hierarchical ATM networks. *Seventh International Workshop on Quality of Service (IWQoS '99)* (pp. 137-146). IEEE.

1998

3. Cicekli, I., & Korkmaz, T. (1998). Generation of simple Turkish sentences with systemic-functional grammar. *Proceedings of the 3rd International Conference on New Methods in Language Processing (NeMLaP-3)* (pp. 165-174).

1997

2. Cicekli, I., & Korkmaz, T. (1997). Generation of Turkish noun and verbal groups with systemic-functional grammar. *Proceedings of the 6th European Workshop on Natural Language Generation (EWNLG-97)* (pp. 1-6).

1996

1. Korkmaz, T., & Cicekli, I. (1996). Generation of Turkish verbal groups with systemic-functional grammar. *Proceedings of the 5th Turkish Symposium on Artificial Intelligence and Neural Networks* (pp. 209-219).

Book, Chapter in Scholarly Book-New - Not Peer-Reviewed/Refereed

2010

2. Akbani, R., & Korkmaz, T. (2010). Applications of Support Vector Machines in Bioinformatics and Network Security. *Application of Machine Learning* (pp. 20). InTech.
<http://www.intechopen.com/books/application-of-machine-learning/applications-of-support-vector-machines-in-bioinformatics-and-network-security>

2003

1. Van Mieghem, P., Kuipers, F.A., Korkmaz, T., Krunz, M., Curado, M., Monteiro, E., Masip-Bruin, X., Sol-Pareta, J., & Sanchez-Lpez, S. (2003). Quality of Service Routing. *Quality of Future Internet Services* (pp. 80-117). EU-COST 263 Final Report, edited by Smirnov et al. in Springer LNCS 2856.

Contracts, Fellowships, Grants, Sponsored Research and Residencies

Grant - Funded

2012

5. Korkmaz, T. (Principal), "Prioritization-based QoS Support with Attack Resilience in Wireless Ad Hoc Networks (Grant Web Page)," Sponsored by DoD Infrastructure Support Program for HBCU/MI, \$587,872.00. (October 2008 - September 2012).

2010

4. Korkmaz, T. (Co-Principal), Boppana, R. (Co-Principal), Grigoryan, A. (Co-Principal), Moriera, O. (Co-Principal), & Raju, G.V.S. (Principal), "Experimental Research in High-Performance Computing and Wireless Networking, Award Number: 0551501," Sponsored by NSF CRI, \$500,316.00. (July 2006 - June 2010).

2007

3. Korkmaz, T. (Principal), "Integrated QoS and security mechanisms to support mission critical applications in MANETs," Sponsored by CIAS Research Support, \$78,291.00. (December 2006 - December 2007).

2006

2. Korkmaz, T. (Principal), "Power-efficient mechanisms for detecting replay-based intruders in wireless ad hoc networks," Sponsored by CIAS Research Support, \$55,792.00. (June 2004 - August 2006).

2004

1. Korkmaz, T. (Co-Principal), "HPNC: Internet 2 Connectivity for UTHSCSA and UTSA, Award Number: 0228927," Sponsored by NSF High Performance Network Connections (HPNC), \$150,000.00. (September 2002 - August 2004).

Grant - Currently Under Review

2020

1. Korkmaz, T., "NeTS: Small: SDN-based Diversified Routing Services in WANs," Sponsored by NSF, Federal, \$393,278.00. (September 1, 2017 - 2020).

Grant - Not Funded

2021

11. Korkmaz, T., "S-STEM: Increasing The Number of Academically Talented Low-income Students in Computer Science through Student-Centered Activities," Sponsored by NSF, Federal, \$500,000.00. (2016 - 2021).

2020

10. Korkmaz, T., Center of Excellence: Research Data Analysis (PI: Dr. Nicole L. Beebe). I participate in this collaborative grant with a project entitled Graph Mining for BigData Analysis in Cloud, Sponsored by AFRL, Centers of Excellence: Autonomy, Cyber Security, Research Data Analysis at Historically Black Colleges and Universities and Other Minority-Serving Institutions of Higher Education, Federal, \$5,000,000.00. (2015 - 2020).

2019

9. Korkmaz, T., "Big Data Collection and Mining for Remote Reality Applications," Sponsored by ARL HBCU/MI PRI (NS CTA), Federal, \$353,798.00. (2016 - 2019).
8. Korkmaz, T., "CSR: Small: Remote Reality based Monitoring in Smart Cities," Sponsored by NSF, Federal, \$365,287.00. (September 2016 - August 2019).

2018

7. Korkmaz, T., "Big Data Collection and Mining in Wireless Mobile Tactical Networks," Sponsored by UTSA Limited Submission for DoD HBCU/MI, UTSA, \$500,000.00. (2015 - 2018).
6. Korkmaz, T., "III: Small: Multi-sensory Data Acquisition and Mining in Smart Environments," Sponsored by NSF, Federal, \$361,045.00. (September 2015 - August 2018).

2017

5. Korkmaz, T. (Principal), Popescu, D. (Principal), & Olariu, S. (Co-Principal), "CSR:Small:Collaborative Research: DETECT: Distributed," Sponsored by NSF, Federal, \$500,000.00. (August 2014 - July 2017).

2016

4. Korkmaz, T., "Graph mining and Big Data analytics - Summer Research," Sponsored by U.S. DEPARTMENT OF HOMELAND SECURITY (DHS), Federal. (June 2016 - August 2016).
3. Korkmaz, T., "QoS routing in SDN-based cloud networks - Summer Research," Sponsored by The Office of Naval Research (ONR) Summer Faculty Research Program, Federal. (June 2016 - August 2016).
2. Korkmaz, T. (Principal), "NRI: Small: Remote Monitoring and Control with Multiple," Sponsored by NSF, Federal, \$499,791.00. (August 2013 - August 2016).

2015

1. Korkmaz, T. (Principal), "Graph Mining for BigData Analysis using Cloud Technologies," Sponsored by UTSA GREAT, UTSA, \$20,000.00. (September 1, 2014 - August 31, 2015).

Presentations

Oral Presentation - Peer-Reviewed/Refereed

2014

1. Korkmaz, T., "Hyper-Sequence Graph Mining in Cloud," Grand Challenges in Engineering and Applied Sciences (GrandEng 2014). (May 16, 2014).

Paper - Peer-Reviewed/Refereed

2010

2. Korkmaz, T., "Batch Forwarding in Wireless Sensor Networks," Milcom 2010, Pages 1-9, IEEE, AFCEA. (November 2010).
1. Korkmaz, T., & Sarac, K., "Characterizing Link and Path Reliability in Large-Scale Wireless Sensor Networks," IEEE 6th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob). (October 2010).

Invited Talk - Not Peer-Reviewed/Refereed

2001

1. Krunz, M., & Korkmaz, T., "Computation of QoS routes in the presence of state inaccuracies," 16th IEEE Computer Communications Workshop, Charlottesville, Virginia. (October 2001).

Oral Presentation - Not Peer-Reviewed/Refereed

2014

2. Korkmaz, T., & zz Yu, X., "Hyper-Sequence Graph Mining on ZeroVM," ZeroVM Project Meeting, RackSpace, Inc. (March 26, 2014).

2005

1. Gong, C., Le, T., Korkmaz, T., & Sarac, K., "Log-based IP Traceback in AS-Level Partial Deployment Scenario," South Central Information Security Symposium (SCISS), Austin, TX, USA. (April 2005).

Scholarship/Research/Creative Works Currently in Progress

3. Korkmaz, T., & Akin, E., QoS issues in SDNs (software defined networks)
2. Korkmaz, T., & Yu, X., Hyper-Graph Mining
1. Korkmaz, T., & Wichmann, A., Mobile Robot Coordination in Wireless Robot and Sensor Networks

TEACHING

Teaching Interests

Broadband Networks and Multimedia Communications, Internet Protocols, Simulation and Performance Evaluation of Computer Systems, Graph and network algorithms, Optimization, Operating Systems, Data Structures and Algorithms

Courses Taught

Graduate

Networks, Simulation, Research Seminar, Operating systems

Undergraduate

Computer Networks, Data Communications, Simulation Techniques, Programming with Engineering Applications, Advanced Programming, Web design

Directed Student Learning

Dissertation Committee Member, "APPROXIMATING APPLICATION PERFORMANCES IN CLOUD DATA CENTERS AND SIMULATED MACHINES." Completed, (November 29, 2016).

Advised: Mohammad Shahedul Islam

Dissertation Committee Member, "Detecting Sequential Consistency Violations in Multi-Core and Many-Core Systems." Completed, (October 28, 2016).

Advised: Mohammad M. Islam

Dissertation Committee Member, "Performance and Accuracy Analysis of Programs

Using Approximate Techniques." Completed, (October 6, 2016).
Advised: Riad Akram

Master's Non-Thesis Committee Member, "Unsplittable Flow Problems in Computer Networks." Completed, (April 18, 2016).
Advised: Narender Soorineeda

Dissertation Committee Member, "SYSTEM PERFORMANCE ANALYSIS AND GUARANTEE THROUGH WORKLOAD." Completed, (December 7, 2015).
Advised: Mohammad Shahedul Islam

Master's Non-Thesis Committee Member, "Multicast Routing." Completed, (November 4, 2015).
Advised: Mohand Akli Guiddir

Dissertation Committee Member, "A HOLISTIC APPROACH USING HONEY COMMUNITIES FOR CYBER EVENT DETECTION." Completed, (August 25, 2015).
Advised: James R. Rutherford

Dissertation Committee Member, "An Elastic Mixed-Criticality Scheduling Framework For Cyber-Physical Systems." Completed, (August 4, 2015).
Advised: Hang Su

Dissertation Committee Member, "Security Analysis of Multimedia Communication Protocols in Traditional and Emerging Models." Completed, (July 31, 2015).
Advised: Ali Tekeoglu

Dissertation Committee Member, "Machine Learning and Graph Theoretical Approaches Toward Precise Disease Classification, Prognosis and Treatment." Completed, (June 11, 2015).
Advised: Md Jamiul Jahid

Dissertation Committee Member, "The Relentless Execution Model for Task-uncoordinated Parallel Computation in Distributed Memory Environments." Completed, (May 18, 2015).
Advised: Lucas Wilson

Dissertation Committee Chair, "Hyper-Sequence-Graph Mining." Completed, (April 28, 2015).
Advised: Xinran Yu

Dissertation Committee Chair, "Task Allocation and Path-Planning in Wireless Robot Sensor Networks." Completed, (April 20, 2015).
Advised: Andrew Wichmann

Master's Non-Thesis Committee Member, "A Study of Delauney Triangulation Methods." Completed, (April 16, 2015).

Advised: Riley Foster

Master's Non-Thesis Committee Member, "Brian-Machine Interface Control - Science? Or still Science Fiction." Completed, (December 11, 2014).

Advised: Mark Corsi

Dissertation Committee Member, "Machine Learning and Graph Theoretical Approaches Toward Precise Disease Classification, Prognosis and Treatment." Proposal, (April 30, 2014).

Advised: Md Jamiul Jahid

Master's Non-Thesis Committee Chair, "Software Defined Networks." Completed, (April 23, 2014).

Advised: Erdal Akin

Master's Non-Thesis Committee Chair, "Realism in VANET Simulation." Completed, (April 16, 2014).

Advised: Nathaniel Kyle Ng

Dissertation Committee Chair, "Hyper-Sequence-Graph Mining." Proposal, (January 7, 2014).

Advised: Xinran Yu

Dissertation Committee Member, "Securing Multimedia Communication in Traditional and Emerging Architectures." Proposal, (December 19, 2013).

Advised: Ali Tekeoglu

Dissertation Committee Chair, "Task Allocation and Path-Planning in Wireless Robot Sensor Networks." Proposal, (December 12, 2013).

Advised: Andrew Wichmann

Dissertation Committee Member, "The Relentless Execution Model for Task-uncoordinated Parallel Computation in Distributed Memory Environments." Proposal, (December 10, 2013).

Advised: Lucas Wilson

Dissertation Committee Member, "Mobile Assisted Security Framework For wireless Sensor Networks." Completed, (December 6, 2013).

Advised: Baris Tas

Master's Thesis Committee Member, "Controlling and Location Monitoring of a Mobile Robot for Android Tablet." Completed, (December 2, 2013).

Advised: Armondo Ortega

Master's Thesis Committee Member, "An Algorithm for Minimizing Firewall Policies, Diverse Firewall Design, and Policy Queries." Completed, (November 21, 2013).
Advised: Mohammed Al Qurashi

Dissertation Committee Member, "An Elastic Mixed - Criticality Scheduling Framework for Cyber - Physical Systems." Proposal, (August 26, 2013).
Advised: Hang Su

Master's Non-Thesis Committee Chair, "Content-Based File Type Identification." Completed, (July 30, 2013).
Advised: Orhan Abar

Master's Thesis Committee Member, "Multiple Sensor Data Formats Supporting Power Consumption Assessments for Smartphone-Based M-Health Applications." Completed, (July 24, 2013).
Advised: Rodrigo Escobar Palacios

Dissertation Committee Member, "Energy-Efficient Secure and Anonymous Communications Protocol for Wireless Sensor Networks." Completed, (May 3, 2013).
Advised: Pengjun Pan

Master's Thesis Committee Member, "Assessment of Run-Time Malware Detection Through Critical Function Hooking and Process Introspection Against Real-World Attacks." Completed, (April 25, 2013).
Advised: Mark Griffin

Master's Thesis Committee Member, "Technical Security Issues in Cloud Computing." Completed, (April 24, 2013).
Advised: Kadri Berk Aktan

Master's Thesis Committee Member, "Cyber Crimes." Completed, (April 24, 2013).
Advised: Mshari Aljumaie

Master's Thesis Committee Chair, "Issues with Password Security and Alternatives." Completed, (April 23, 2013).
Advised: Mohammad Chowdhury

Master's Thesis Committee Member, "Review of GPS Technology and Applications for Location Tracking." Completed, (April 15, 2013).
Advised: Salvador J. Rodriguez

Master's Thesis Committee Chair. Completed, (December 2012).
Advised: Badri Sampath

Dissertation Committee Member, "Botnets Analysis and Detection Methods Based on

Network Behavior." Completed, (November 2012).
Advised: Areej AL-BATAINEH

Master's Thesis Committee Member, "Towards System Security Using Trusted Hardware and/or Software." Completed, (November 2012).
Advised: Ibrahim Althomali

Master's Thesis Committee Member, "Annotation Based Source to Source Transformation of MPI Application for Performance Optimization." Completed, (November 2012).
Advised: Md. Ziaul Haque

Master's Thesis Committee Member, "Software Define Networking." Completed, (November 7, 2012).
Advised: Kevser Ovaz

Master's Thesis Committee Member, (August 27, 2012).
Advised: George Pandzik

Master's Thesis Committee Chair, "Connectivity Base Localization Techniques in Wireless Sensor Networks." (May 10, 2012).
Advised: Charles Zinsmeyer

Master's Thesis Committee Member, "Secure Path Validation and Compromised Node Detection Using a Mobile Robot in WSN." (April 30, 2012).
Advised: Dipti Dasari Naga Santoshi

Master's Thesis Committee Chair, "Rescue Systems Using Mobile Robot and Sensor Network." (April 26, 2012).
Advised: Burcu Demirelli Okkalioglu

Master's Thesis Committee Chair, "Secure and Reliable Deduplication in Cloud Storage." (April 26, 2012).
Advised: Faisal Elramalli

Dissertation Committee Member, "Improving The Spectrum Usage Efficiency Of Personal Area Devices Using Cognitive Radio Technology." (April 24, 2012).
Advised: Andre Mayers

Dissertation Committee Member, "Mobile Assisted Security Framework in Wireless Sensor Networks." (April 23, 2012).
Advised: Baris Tas

Master's Thesis Committee Chair, "Internet Traffic Classification." (April 17, 2012).
Advised: Murat Okkalioglu

Dissertation Committee Member, "Energy-Efficient Secure and Anonymous Communication Protocols for Wireless Sensor Networks." (December 9, 2011).
Advised: Pengjun Pan

Master's Thesis Committee Member, (November 28, 2011).
Advised: Alekya Reddy

Master's Thesis Committee Chair, "Cognitive Radio Network." (November 22, 2011).
Advised: Javed Kaiser

Advisor, "Reliability and security in scale-free networks." Completed, (June 2011).
Advised: Husnu Narman

Master's Thesis Committee Chair, "Social Network and its Security." (April 2011).
Advised: Hasan Ahmed

Master's Thesis Committee Chair, "Effect of Characteristic of Networks to Node Placement." (April 12, 2011).
Advised: Husnu Narman

Master's Thesis Committee Member, (November 23, 2010).
Advised: Tanzir Musabbir

Dissertation Committee Member, "Protecting Cryptographic Keys and Functions Against Software-Based Attacks." (November 11, 2010).
Advised: PAUL PARKER

Dissertation Committee Member, (May 2010).
Advised: Areej Bataineh

Master's Thesis Committee Chair, (May 2010).
Advised: A.T. Fouty

Dissertation Committee Member, "Nonlinear Transform Approach To The Reduction Of Peak-To-Average Power Ratio In Orthogonal Frequency Division Multiplexing (Ofdm) Systems." (April 2010).
Advised: Serkan Dursun

Master's Thesis Committee Chair, (April 21, 2010).
Advised: Ramakrishna Annamaneni

Master's Thesis Committee Chair, (December 9, 2009).
Advised: Martin Kail

Dissertation Committee Member, (December 3, 2009).
Advised: Veysel Demir

Master's Thesis Committee Member, (October 26, 2009).
Advised: Edward A. Salinas

Dissertation Committee Member, (August 21, 2009).
Advised: Veysel Demir

Dissertation Committee Chair, "Defending against Malicious Nodes in Closed MANETs through Packet Authentication and a Hybrid Trust Management System." (June 19, 2009).
Advised: Rehan Akbani

Dissertation Committee Member, (May 4, 2009).
Advised: Xu (Kevin) Su

Master's Thesis Committee Member, (April 24, 2009).
Advised: Mark Smith

I have served more than 40 committees similar to the above ones., (2002 - 2008).

Other Instructional Activities

- 2013 - Present Course coordinator, I coordinate CS 2123 Data structures with two sections.
- 2017 Publications by Students, Akin, E., & Korkmaz, T. (2017). Routing Algorithm for Multiple Unsplittable Flows Between Two Cloud Sites with QoS Guarantees. (pp. 1-7). IEEE ICNC'17, Workshop on Computing, Networking and Communications (CNC).
- 2017 Publications by Students, Akin, E., & Korkmaz, T. (2017). An Efficient Binary-Search Based Heuristic for Extended Unsplittable Flow Problem. (pp. 1-6). IEEE ICNC'17, Workshop on Computing, Networking and Communications (CNC).
- 2016 Publications by Students, Yu, X., Zhang, H., Lilburn, T., Cai, H., Gu, J., Korkmaz, T., & Wang, Y. (2016). Just-in-time expression of influential genes in the cellular networks of the malaria parasite Plasmodium falciparum during the red blood cycle. (pp. 1-6 (acceptance rate 19%)). The IEEE International Conference on Bioinformatics and Biomedicine (BIBM). cci.drexel.edu/ieebibm/bibm2016/
- 2015 Publications by Students, Wichmann, A., & Korkmaz, T. (2015). Smooth Path Construction and Adjustment for Multiple Mobile Sinks in Wireless Sensor Networks. *Computer Communications*, 72, 93-106. www.sciencedirect.com/science/article/pii/S0140366415002157

- 2015 Course coordinator, I have coordinated CS 2073 Programming with Eng App. (two sections).
- 2015 Peer observer, I peer observed Dr. Lama two times, one in Spring and one in Fall.
- 2015 Publications by Students, Yu, X., & Korkmaz, T. (2015). Hypergraph querying using structural indexing and layer-related-closure verification. *Knowledge and Information Systems*, 1-29. <http://dx.doi.org/10.1007/s10115-015-0829-4>
- 2015 Publications by Students, Yu, X., & Korkmaz, T. (2015). Heavy path based super-sequence frequent pattern mining on web log dataset. *Artificial Intelligence Research*, 1-12. <http://dx.doi.org/10.5430/air.v4n2p1>
- 2015 Publications by Students, Yu, X., Korkmaz, T., Lilburn, T., Cai, H., Gu, J., & Wang, Y. (2015). Heavy path mining of protein-protein associations in the malaria parasite. *Methods*, 83, 63-70. <http://www.sciencedirect.com/science/article/pii/S1046202315001486>
- 2015 Publications by Students, Yu, X., Lilburn, T., Cai, H., Gu, J., Korkmaz, T., & Wang, Y. (2015). PageRank influence analysis of protein-protein association networks in the malaria parasite *Plasmodium falciparum* (pp. 1-34). Indianapolis, IN, USA: ICIBM 2015. watson.compbio.iupui.edu/yunliu/icibm/
- 2015 Publications by Students, Wichmann, A., & Korkmaz, T. (2015). Analysis of deployment and movement policies in wireless sensor and robot networks. *IEEE WoWMoM 2015* (pp. 1-9).
- 2014 Publications by Students, Wichmann, A., Korkmaz, T., & Tosun, A. S. (2014). Minimum Hop and/or Minimum Distance Robot Movement with Connectivity Constraints in WRSNs. *IEEE Globecom 2014 - Ad Hoc and Sensor Networking Symposium* (pp. 1-7).
- 2014 Publications by Students, Yu, X., Korkmaz, T., Lilburn, T., Cai, H., Gu, J., & Wang, Y. (2014). Heavy Path Mining Reveals Novel Protein-Protein Associations in the Malaria Parasite *Plasmodium falciparum*. *IEEE International Conference on Bioinformatics and Biomedicine (BIBM)* (pp. 107-112). (acceptance rate 19%).
- 2014 Publications by Students, Yu, X., & Korkmaz, T. (2014). Finding the Most Evident Co-Clusters on Weblog Dataset Using Frequent Super-Sequence Mining. *IEEE 15th International Conference On*

- Information Reuse And Integration (IRI) (pp. 1-8).
<http://www.pitt.edu/~iri2014/>
- 2014 Publications by Students, Yu, X., & Korkmaz, T. (2014). Hyper Sequence Pattern Mining on ADLs. Data Science for Social Good Workshop at KDD (pp. 1-4). ACM.
<http://dssg.uchicago.edu/kddworkshop/papers/you.pdf>
- 2014 Publications by Students, Wichmann, A., Demirelli Okkalioglu, B., & Korkmaz, T. (2014). The integration of mobile (tele) robotics and wireless sensor networks: A survey. *Computer Communications*, 51, 21-35.
<http://www.sciencedirect.com/science/article/pii/S0140366414002266>
- 2013 Publications by Students, Yu, X., & Korkmaz, T. (2013). Super-sequence Frequent Pattern Mining on Sequential Dataset. *IEEE International Conference on Big Data* (pp. 52 - 59).
- 2013 Publications by Students, Narman, H., Korkmaz, T., & Tek, S. (2013). Utilizing distance distribution in determining topological characteristics of multi-hop wireless networks. *IEEE International Conference on Computing, Networking and Communications (ICNC)* (pp. 149-154). IEEE.
- 2012 Publications by Students, Rehan Akbani, Turgay Korkmaz and G. V. S. Raju, Mobile Ad-Hoc Networks Security, Recent Advances in Computer Science and Information Engineering Lecture Notes in Electrical Engineering, 2012, Volume 127, 659-666, DOI: 10.1007/978-3-642-25769-8_92
- 2012 Publications by Students, Andrew Wichmann, Justin Chester, Turgay Korkmaz, Smooth Path Construction for Data Mule Tours in Wireless Sensor Networks *IEEE GLOBECOM 2012*
- 2012 Publications by Students, Charles J. Zinsmeyer and Turgay Korkmaz, A Comparative Review of Connectivity-Based Wireless Sensor Localization Techniques, *Journal of Internet Services and Information Security (JISIS)*, volume: 2, number: 1/2, pp. 59-72. link
- 2012 Publications by Students, Navid Pustchi and Turgay Korkmaz, Improving packet reception rate for mobile sinks in wireless sensor networks, 2012 *IEEE International Symposium on World of Wireless, Mobile and Multimedia Networks (WoWMoM)*, Publication Year: 2012 , Page(s): 1 - 9
- 2012 Publications by Students, Rehan Akbani, Turgay Korkmaz, GVS Raju,

- EMLTrust: An Enhanced Machine Learning Based Reputation System,
Ad Hoc Networks Volume 10, Issue 3, Pages 435-457
- 2011 Course Development, I significantly improved my course materials for CS2213 Advance Programming in 2011.
- 2011 Publications by Students, Drew Wichmann, Justin Chester, Turgay Korkmaz, Tour Planning for UAV Data Mules in Border Wireless Multimedia Sensor Networks, poster presentation in UTSA CoS Research Conference. http://utsa.edu/sciences/research_conference/
- 2011 Course Development, I developed significant amount of powerpoint materials for CS1143 Web Design in Fall 2011.
- 2011 Publications by Students, Navid Pustchi and Turgay Korkmaz, Improving reliability in wireless sensor networks using multiple radio, poster presentation in UTSA CoS Research Conference, Sept 30, 2011.
- 2011 Publications by Students, Rehan Akbani and Turgay Korkmaz, "Enhancing Role Based Trust Management with a Reputation System for MANETs," EURASIP Journal on Wireless Communications and Networking, 2011:90 doi:10.1186/1687-1499-2011-90 <http://jwcn.erasipjournals.com/content/2011/1/90>
- 2011 Proctor for the Fall PhD Qualifying Examination
- 2011 Publications by Students, Mark Griffin and Turgay Korkmaz, "Distributed verification of global multiple disjoint paths in mobile wireless networks," The 7th International Wireless Communications and Mobile Computing Conference (IWCMC), IEEE, pp.666-670, doi: 10.1109/IWCMC.2011.5982626
- 2011 Publications by Students, Rehan Akbani, Turgay Korkmaz and G.V.S. Raju, Mobile Ad-hoc Networks Security, The 2nd World Congress on Computer Science and Information Engineering (CSIE 2011), pg 1-4, Changchun, China. <http://world-research-institute.org/conferences/CSIE/2011/index.html>
- 2010 Course Development, I developed significant amount of powerpoint materials for CS2213 Advance Programming in Fall 2010.
- 2010 Publications by Students, Rehan Akbani and Turgay Korkmaz. Applications of Support Vector Machines in Bioinformatics and Network Security, pp. 1-20, Application of Machine Learning, Yagang Zhang (Ed.), ISBN: 978-953-307-035-3, InTech, Available from: <http://www.intechopen.com/articles/show/title/applications-of-support-v>

ector-machines-in-bioinformatics-and-network-security

- 2010 Proctor for the Fall PhD Qualifying Examination
- 2009 Publications by Students, Rehan Akbani, Turgay Korkmaz and G.V.S. Raju, A Hybrid Trust Management System for Automated Fine-Grained Access Control, Proceedings of MILCOM 2009, Sponsored by Raytheon, IEEE, AFCEA
- 2009 Proctor for the Fall PhD Qualifying Examination

SERVICE

Department Service

- 2015 - Present Committee Chair, Lab and Facility committee
- 2014 - Present Class Scheduler
- 2016 - 2017 Committee Member, Faculty Award Committee
- 2015 - 2016 Committee Member, FRC
- 2013 - 2015 Committee Member, Lab and Facility committee
- 2013 - 2015 Committee Member, PhD Qualification Exam Committee
- 2013 - 2014 Committee Chair, Faculty Search Committee
- 2012 - 2013 Committee Member, Faculty Search Committee
- 2011 - 2012 Committee Member, Graduate Studies Committee
- 2009 - 2011 Committee Member, Communications Committee
- 2009 - 2011 Committee Member, Graduate Recruitment Committee
- 2005 - 2007 Committee Member, Curriculum committee
- 2003 - 2005 Committee Member, MS committee
- 2002 - 2003 Committee Member, Lab committee
- 2002 - 2003 Committee Member, PhD committee

College Service

2016	Judge, COS Conference
2015	Judge, COS Conference
2013	Judge, COS Conference
2012 - 2013	Committee Member, CFRAC
2012	Committee Member, Doctoral Fellowships Committee
2012	Judge, COS Conference
2009 - 2011	Committee Member, College Policy Committee
2011	Judge, COS Conference
2003 - 2004	Committee Member, Budget Committee

University Service

2002 - Present	Faculty Advisor, Two Student Associations (TURKSA, SAID), UTSA
2016 - 2017	Committee Member, President's Distinguished Achievement Awards: Excellence in Community Service committee, UTSA
2015 - 2017	Committee Member, Faculty Senate standing committee: University Curriculum Committee (UCC), UTSA
2013 - 2016	Committee Member, Faculty Senate, UTSA
2015	Committee Member, President's Distinguished Achievement Awards: Excellence in Community Service committee, UTSA
2013 - 2015	Committee Member, Faculty Senate standing committee: Academic Policy and Requirements Committee (APR), UTSA
2014	Committee Chair, President's Distinguished Achievement Awards: Excellence in Community Service committee, UTSA
2013 - 2014	Committee Member, Faculty Senate Executive committee, UTSA

- 2013 Committee Member, President's Distinguished Achievement Awards: Excellence in Community Service committee, UTSA
- 2011 - 2013 Committee Member, Grievance Committee, UTSA
- 2012 Committee Member, President's Distinguished Achievement Awards Committee, UTSA
- 2011 Committee Member, President's Distinguished Achievement Awards Committee, UTSA

Professional Service

- 2011 - Present Editor, Journal Editor, Journal of Internet Services and Information Security (JISIS)
- 2008 - Present Editor, Journal Editor, Computer Networks (Elsevier)
- 2007 - Present Editor, Book, Far East Journal of Electronics and Communications, Pushpa Publishing House
- 2002 - Present Committee Member, Several PhD and MS supervising committees at the University of Texas at San Antonio
- 2017 Reviewer, Conference Paper, IECCO 2017 (IECCO: Integrating Edge Computing, Caching, and Offloading in Next Generation Networks)
- 2017 TPC member, The 2017 IEEE Conference on Computer Communications Workshops (INFOCOM WKSHPS): IECCO: Integrating Edge Computing, Caching, and Offloading in Next Generation Networks
- 2016 TPC member, Globecom'16 - CSSMA
- 2016 Reviewer, Grant Proposal, Kentucky Science & Engineering Foundation
- 2016 TPC member, IEEE WCNC 2016 - Track 3 - Mobile and Wireless Networks
- 2016 TPC member, IEEE ICC 2016 - Mobile and Wireless Networking Symposium (ICC'16 MWN)
- 2015 TPC member, IEEE ICC'15 AHSN (Ad-hoc and Sensor Networking Symposium)

2015 Session Chair, IEEE WOWMOM 2015 Conference

2015 Reviewer, Conference Paper, ICCSPA'15 (Communications)

2014 TPC member, IEEE ICC'14 AHSN (Ad-hoc and Sensor Networking Symposium)

2014 Judge, I-SWEEEP Science Fair

2013 TPC member, IEEE GLOBECOM 2-13 - AHSN

2013 TPC member, ICCCN 2013 MRTM (Multimedia, Real-Time Networking, and Network Modeling Track)

2013 Judge, I-SWEEEP Science Fair

2012 TPC member, ICC'12 AHSN (IEEE ICC 2012 - Ad-hoc and Sensor Networking Symposium)

2012 TPC member, International Conference on Communications, Computers and Applications

2012 TPC member, IEEE ICC MobiCC'12

2012 TPC member, ICCCN12 -- Network Algorithms and performance Evaluation Track

2012 Judge, I-SWEEEP Science Fair

2011 Reviewer, Journal Article, 2011 UTSA COS Research Conference

2010 - 2011 IWCMC2011-Federated Wireless Sensors (Federated Wi, TPC)

2011 Judge, I-SWEEEP Science Fair

2011 Program Organizer, The Institute of Academic Studies (IAS)

2011 Reviewer, Grant Proposal, Sam Houston State University

2010 TPC member, GC10 - AHSN (IEEE Globecom 2010 - Ad-hoc and Sensor Networking Symposium)

2010 Judge, I-SWEEEP Science Fair

2003 - 2010 Reviewer, Journal Article, IEEE/ACM Transactions on Networking, Computer Networks, Computer Communications, Networks, IEEE

Transactions on Wireless Comm, IEEE Communications Magazine,
JOURNAL OF COMMUNICATIONS AND NETWORKS, IEEE
Communications Letters, Wireless Networks, Multimedia Systems

- 2009 Judge, I-SWEEEP Science Fair
- 2009 Judge, SST Schools' school-wide science fairs
- 2009 Reviewer, Conference Paper, ICCCN 2009, Network Algorithms and Performance Evaluation (NAPE) track
- 2009 Session Chair, IEEE ICCCN 2009
- 2009 TPC member, ICC'2009 Ad-Hoc and Sensor Networking Symposium, ICC'2009--AHSNET
- 2008 Judge, I-SWEEEP Science Fair
- 2008 TPC member, IEEE Globecom 2008 Computer and Communications Network Security Symposium
- 2008 TPC member, IEEE International Conference on Wireless and Mobile Computing, Networking and Communications)
- 2008 TPC member, IEEE ICC'08 INS
- 2008 Editor, Book, The IFIP Networking 2008 Conference
- 2007 TPC member, ICC 2007 Computer and Communications Network Security Symposium
- 2007 TPC member, IEEE Globecom 2006 - Network Security Systems
- 2007 TPC member, IEEE GLOBECOM 2007, Information, Network, and Communications Security track in the General Symposium
- 2007 TPC member, The 32nd IEEE Conference on Local Computer Networks (LCN)
- 2007 Program Co-chair, The 2nd International Workshop on Evolution toward Next Generation Internet (ENGI), Part of ICCS 2007 Chinese Academy of Sciences
- 2007 TPC member, The 5th IEEE Workshop on End-to-End Monitoring Techniques and Services (E2EMON)

- 2007 TPC member, The IFIP Networking 2007 Conference
- 2007 TPC member, The 3rd International Conference on Embedded Software and Systems (ICCESS 2007)
- 2006 Judge, School of Science and Technology (SST) Science Fair
- 2006 TPC member, The IEEE 20th International Conference on Advanced Information Networking and Applications (AINA 2006)
- 2006 Editor, Book, The first international Workshop on Mobile Services and Personalized Environments (MSPE'06),
- 2006 Program Co-chair, Workshop on Evolution toward Next Generation Internet (ENGI), Part of ICCS 2006 University of Reading
- 2006 TPC member, IEEE INFOCOM 2006 Conference
- 2005 Session Chair, IEEE VTC 2005-Fall, Security, Multimedia and QoS support
- 2005 TPC member, The Symposium on Mobile Computing of the IEEE WirelessCom 2005
- 2005 TPC member, IADIS Virtual Multi Conference on Computer Science and Information Systems (MCCIS 2005)
- 2005 TPC member, IEEE INFOCOM 2005 Conference
- 2005 Judge, Alamo Regional Academy of Science
- 2004 TPC member, International Workshop on Network Design and Architecture (IWNDA) 2004,
- 2004 Program Co-chair, ACM Symposium on Applied Computing (SAC 2004), Special Track on Computer Networks (CN)
- 2004 TPC member, IEEE INFOCOM 2004 Conference
- 2003 Reviewer, Journal Article, Computer Networks
- 2003 Program Co-chair, ACM Symposium on Applied Computing (SAC 2003), Special Track on Parallel and Distributed Systems and Networking

Public Service

2002 - Present Officer, President/Elect/Past, Riverwalk Education Foundation, Inc., A non-profit organization operating K-12 charter schools in Texas

2016 - 2017 Officer, Treasurer, Leon Valley Home Owner Association (HOA)

Awards, Honors, and Biographical Listings

2015 Certificate of Teaching Excellence, UTSA College of Sciences

2015 Richard S. Howe Outstanding Undergraduate Teaching, UTSA College of Sciences

2013 Certificate of Excellence in Recognition for Demonstrated Excellence in Teaching, UTSA College of Sciences

2012 Certification of Appreciation for contributions to UTSA student organizations

2011 Certification of Appreciation for contributions to UTSA student organizations

2010 Certificate of Excellence in Community Service, College of Sciences, UTSA

2010 Certification of Appreciation for contributions to UTSA student organizations

2010 UTSA President's Distinguished Achievement Award for Recognition of Excellence in Community Service (tenured), UTSA

2006 Listed in Who's Who of Emerging Leaders

2006 Certification of Appreciation for contributions to UTSA student organizations

2005 Listed in Who's Who in American Education

2005 IEEE Certification of Appreciation for contributions to IEEE VTC2005-Fall

2005 Recognition for contributions to UTSA student organizations

2005 Certificate of Appreciation, Alamo Regional Academy of Science

2004 Advisor Appreciation, University of Texas at San Antonio

2003	ACM Certificate of Appreciation for contributions to ACM SAC 2003
2002	Outstanding contributions and efforts, Daisy Science Academy
2000	Registration waiver, IEEE IPCCC 2000, Phoenix, AZ (\$200)
2000	Travel award, ACM SIGMETRICS 2000, Santa Clara, CA (\$700)
1998	Graduate Tuition Scholarship (\$3326 in Spring 1998), University of Arizona
1996	Turkish Government Scholarship for MS and PhD educations in USA
1994	Bilkent University Scholarship for graduate level education
1994	Ihsan Dogramaci Supreme Success Award for being the top first among the graduates of the Computer Sciences and Engineering Department, Hacettepe University
1994	Science Encouragement Reward for being the third of the Faculty of Engineering, Hacettepe University

Professional Memberships

2002 - Present	ACM
1997 - Present	IEEE

Licensures and Certifications

2012	Faculty Recruitment Training, UTSA
2012	Title IX training, UTSA

Faculty Development Activities Attended

2014 - 2015	Faculty Development Leave, Graph Mining for BigData Analysis in Cloud; and WRSN, UTSA
2012	Board Member Training, SST Charter Schools, San Antonio, TX
2012	Conference Attendance, IEEE INFOCOM 2012, Orlando, FL

- 2011 Conference Attendance, DOD National HBCU/MI Conference
- 2009 Tutorial, Conflict of Interest & Intellectual Property FYI Sessions, UTSA
- 2009 Conference Attendance, IEEE ICCCN 2009, San Francisco, CA