Dulal C. Kar, Ph.D.
Professor, Department of Computing Sciences
Texas A&M University-Corpus Christi,
6300 Ocean Dr, Corpus Christi, TX 78412
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(361) 825 – 5878

Academic Preparation

- **Ph.D.,** Engineering – specialization in Computer Engineering, North Dakota State University (NDSU), 1994.
- **MS,** Electrical and Electronics Engineering - specialization in Computer Engineering, North Dakota State University (NDSU), 1991.
- **M.Sc.Engg.,** Computer Engineering, Bangladesh University of Engineering and Technology (BUET), 1985.
- **B.Sc.Engg.,** Electrical and Electronics Engineering, Bangladesh University of Engineering and Technology (BUET), 1982.

Thesis/Dissertation:

- D. C. Kar, Systolic Architectures for Signal Processing, Ph.D. dissertation, North Dakota State University, Fargo, 1994.
- D. C. Kar, Systolic Architectures for Projection Operators, MS thesis, North Dakota State University, 1991.
- D. C. Kar, A Optimum Software Package for On-line System Management and Job Accounting, MS thesis, Bangladesh University of Engineering and Technology (BUET), 1985.

Expertise/Interests: Information security, computer networks, and algorithms.

Academic Experience

1. **Professor of Computer Science**, Department of Computing Sciences, Texas A&M University-Corpus Christi (TAMUCC), August 2018 to present.
2. **Associate Professor of Computer Science**, Department of Computing Sciences, Texas A&M University-Corpus Christi (TAMUCC), August 2004 to present.
3. **Assistant Professor of Computer Science**, Department of Computing Sciences, Texas A&M University-Corpus Christi (TAMUCC), August 1999 to 2004.
4. **Visiting Faculty,** North South University (NSU), Bangladesh, Summer-2000.
5. **Visiting Assistant Professor,** Department of Computer Science, Virginia Polytechnic Institute and State University (popularly known as Virginia Tech), August 1997 to August 1999.
6. **Assistant Professor of Computer Science and Computer Information Systems**, Mountain State University (formerly known as the College of West Virginia), August 1993 to August 1997.
7. **Teaching and Research Assistant,** Department of Electrical and Electronics Engineering, North Dakota State University (NDSU), August 1987 to August 1993.
8. **Assistant Professor,** Department of Computer Science and Engineering, Bangladesh University of Engineering and Technology (BUET), 1985 to 1987.
9. **Lecturer,** Department of Electrical and Electronics Engineering, Bangladesh University of Engineering and Technology (BUET), 1982 to 1985.

Grants

1. **Co-Principal Investigator,** Title: MRI: Acquisition of Cloud Computing Infrastructure for Science and Engineering Research Innovations, National Science Foundation, $517,657; PI: Dr. Ajay Katangur, Other Co-PIs: Dr. Michael Starek, Dr. Scott King and Dr. Jinha Jung, (September 1, 2018 - August 31, 2020).
2. **Principal Investigator,** Title: REU Site: Applied Computing Research in Unmanned Aerial Systems, National Science Foundation, $359,810; Co-Principal Investigator: Dr. Ajay Katangur, (June 1, 2018 - May 31, 2021).
3. **Principal Investigator,** Title: Supporting Undergraduates for Careers in Computing and Engineering with Scholarships and Supervision, National Science Foundation, **$609,857**; Co-Principal Investigators: Dr. Dugan Um and Dr. Scott King, 2014.
4. **Principal Investigator,** Title: Cyber Defense for High School Students and Teachers (CDSAT), National Science Foundation, **$580,000**; Original PI: Dr. John Fernandez, Co-PI: Mr. Steve Alves, 2012.
5. **Principal Investigator,** Title: CC-NIE Networking Infrastructure: Establishing a Science DMZ for Research in Coastal, Marine, Atmospheric, Environmental, and Geospatial Computing Sciences, National Science Foundation, **$495,666**; Co-Principal Investigators: Dr. James Gibeaut, Mr. Terry Tatum, Dr. Ruizhi Chen, Dr. Ruby Mehrubeoglu, and Dr. Feiqin Xie, 2013.
6. **Principal Investigator,** Title: NSF REU Site: Applied Computing Research in Wireless Sensing of Marine Data, National Science Foundation, **$269,293**; Co-Principal Investigators: Dr. Ahmed Mahdy and Dr. Longzhuang Li, 2010.
7. **Principal Investigator,** Title: Security Protocols for Wireless Sensor Networks, Texas A&M University-Corpus Christi: Texas Research Development Fund, **$29,585**; May 2007.
8. **Co-Principal Investigator,** Title: CRI: IAD – Computing Infrastructure for Research-Based Learning (CIRBL), National Science Foundation, **$650,000**; PI: Dr. John Fernandez, Other Co-PIs: Dr. Mario Garcia, Dr. Scott King, and Dr. Longzhuang Li, August 2007.
9. **Principal Investigator,** Title: Securing Sensitive Data in Random-Access Memory during Computation, Texas A&M University-Corpus Christi: University Research Enhancement Program for FY 2007, **$8,576**; May 2006.
10. **Principal Investigator,** Title: Protecting Confidentiality of Memory-Resident Data, Texas Research Development Fund, **$8,200**; May, 2006.
11. **Co-Principal Investigator,** Title: Extending and Strengthening the Pipeline in Computer Science, National Science Foundation, CISE MII, Award No. EIA-0330822, **$1,349,999**; Principal Investigator: Dr. R. Stephen Dannelly, Other Co-Principal Investigators: Dr. John Fernandez, Dr. Mario Garcia, and Dr. James F. Nystrom, 2003.
12. **Co-Principal Investigator,** Title: A Digital Systems Laboratory to Enhance Teaching and Research, DoD Instrumentation and Research Support Program for Hispanic-Serving Institutions (HSI), **$212,915**; Principal Investigator: Dr. Rafic A. Bachnak, Other Co-Principal Investigator: Dr. Hesham Shaalan, 2002.

13. **Co-Principal Investigator,** Title: Cisco Equipment Donation, **$62,901**; Principal Investigator: Dr. John Fernandez, Other Co-Principal Investigator: Dr. Mario Garcia, 2003.

Book (peer reviewed)

Dulal Kar and Mahbubur Syed, Reference Book: Network Security, Administration, and Management – Advancing Technology and Practice, IGI Global Publishing, June 2011. (Indexed by: Web of Science)(Cited by: 4)

Journal Publications (peer reviewed)

1. **Dulal Kar**, Anusha Nakka, and Ajay Katangur, "A new statistical attack resilient steganography scheme for hiding messages in audio files," International Journal of Information and Computer Security, vol. 10, no. 2-3, pp. 276-302, April 2018. (H-Index: 9)
2. **Dulal Kar**, "On pruning of data in a sliding window for computing a rank-order element," IEEE Signal Processing Letters, vol. 24, no. 7, pp. 1005-1009, July 2017. (Impact Factor: 2.528)
3. **Dulal Kar** and Clifton Mulkey, "A multi-threshold based audio steganography scheme," Journal of Information Security and Applications, vol. 23, pp. 54-67, August 2015. (Impact Factor: 1.186, H-Index: 22)(Cited by: 6)
4. Clifton Mulkey, **Dulal Kar,** and Ajay Katangur, "An efficient protocol for privacy and authentication for resource-constrained devices in wireless networks," International Journal of Cyber Warfare and Terrorism, vol. 3, no. 2, pp. 38-57, April 2013.
5. **Dulal Kar,** Rashad Tatum, Keith Zejdlik, "MHIP: Effective key management for mobile heterogeneous sensor networks," International Journal of Network Security, vol. 10, no. 4, pp. 280-290, July 2013. (Impact Factor: 1.68)
6. Archana Gudala, Longzhuang Li, **Dulal Kar**, Ahmed Mahdy, and Ming Xiao, "A holistic schema matcher," Journal of Advanced Material Research, vols. 225-226, pp. 1242-1245, 2011.
7. **Dulal Kar,** Hung Ngo, and Geetha Sanapala, "Applied cryptography for security and privacy in wireless sensor networks," International Journal of Information Security and Privacy, vol. 3, no. 3, July-September 2009. (Impact Factor: 0.41, H-Index: 7)
8. Vishal Monpara and **Dulal Kar**, "An integrated Web-based system for assignment creation, management, and peer evaluation," The Journal of Computing Sciences in Colleges, vol. 23, no. 6, June 2008.
9. Rafic Bachnak, Ramya Chakinarapu, Mario Garcia, **Dulal Kar**, "A system for video conversion and text data overlay," WSEAS Trans. On Circuits and Systems, vol. 7, no. 1, pp. 39-48, January 2008. (Impact Factor: 0.44, H-Index: 13)
10. **Dulal Kar**, "Teaching cryptography in an applied computing curriculum," The Journal of Computing Sciences in Colleges, vol. 21, no. 4, pp. 119-126, April 2006. (Cited by: 5)
11. **Dulal Kar**, "Network measurement and path characterization using user datagram protocol," The Journal of Computing Sciences in Colleges, vol. 4, no. 4, pp. 321-328, April 2004.
12. Bhargavi Hiremagalur and **Dulal Kar,** "WLAN traffic grapher using Simple Network Management Protocol," The Journal of Computing Sciences in Colleges, no. 4, vol. 20, pp. 151-159, April 2005.
13. Felix Fuentes and **Dulal Kar,** "Ethereal Vs. tcpdump: a comparative study on packet sniffing tools for educational purpose," The Journal of Computing Sciences in Colleges, vol. 20, no. 4, pp. 169-176, April 2005. (Cited by: 60)

14. Anitha Nalluri and **Dulal Kar,** "A Web-based system for intrusion detection," The Journal of Computing Sciences in Colleges, Vol. 20, No. 4, pp. 274-281, April 2005. (Cited by: 11)

15. John Fernandez, Stephen Smith, Mario Garcia, and **Dulal Kar,** "Computer Forensics - A Critical need in computer science programs," The Journal of Computing Sciences in Colleges, vol. 20, no. 4, pp. 315-322, April 2005. (Cited by: 20)
16. **Dulal Kar**, "Network measurement and path characterization using user datagram protocol," The Journal of Computing Sciences in Colleges, vol. 19, no. 4, pp. 321-328, April 2004.
17. Abhijeet Trivedi, **Dulal. Kar,** and Holly Patterson, "Automatic assignment management and peer evaluation," The Journal of Computing Sciences in Colleges, vol. 18, no. 4, pp. 30-37, April 2003. (Cited by: 40)
18. **Dulal Kar,** "Internet path characterization using common Internet tools," The Journal of Computing Sciences in Colleges, vol. 18, no. 4, pp. 124-132, April 2003. (Cited by: 4)
19. **Dulal Kar,** "Internet path characterization tools", The Journal of Computing Sciences in Colleges, vol. 17, no. 5, pp. 140-146, April 2002.
20. **Dulal Kar,** "Detection of plagiarism in computer programming assignments," The Journal of Computing in Small Colleges, vol. 15, no. 3, March 2000.
21. **Dulal Kar** and V. V. Bapeswara Rao, "A CORDIC-based unified systolic architecture for sliding window applications of discrete transforms," IEEE Transactions on Signal Processing, vol. 44, no. 2, pp. 441-444, February 1996. (Impact Factor: 4.3) (Cited by: 19)
22. **Dulal Kar** and V. V. Bapeswara Rao, "On the prime-factor decomposition algorithm for the discrete sine transform", IEEE Transactions on Signal Processing, vol. 42, no. 11, pp. 3258-3260, November 1994. (Impact Factor: 4.3)(Cited by: 22)
23. **Dulal Kar** and V. V. Bapeswara Rao, "A new systolic realization for discrete Fourier transform," IEEE Transactions on Signal Processing, vol. 41, no. 5, pp. 2008-2010, May 1993. (Impact Factor: 4.3)(Cited by: 17)
24. V. V. Bapeswara Rao and **Dulal Kar,** "A new analog voltage sorter," IEEE Transactions on Instrumentation and Measurement, vol. 41, no. 5, pp. 714-716, October 1992. (Impact Factor: 2.456) (Cited by: 6)

Book Chapters (peer reviewed)

1. Clifton Mulkey and **Dulal Kar**, "Identity-based encryption for privacy and authentication in wireless networks," Book chapter published in book Network Security Technologies: Design and Application, Edited by: Abdelmalek Amine, Otmane Ait, and Boualem Benatallah, IGI Global Publications, 2013, pp. 108-128.
2. **Dulal Kar**, Hung Ngo, Clifton Mulkey, and Geetha Sanapala, "Advances in security and privacy in wireless sensor networks," Security and Privacy Assurance in Advancing Technologies: New Developments, Edited by: H. Nemati, IGI Global Publications, November 2010.
3. **Dulal Kar** and Hung Ngo, "Applied cryptography in wireless sensor networks," Applied Cryptography for Cyber Security and Defense: Information Encryption and Cyphering, Edited by: L. Yang and H. Nemati, IGI Global Publications, August 2010.
4. **Dulal Kar**, Hung Ngo, and Geetha Sanapala, "Applied cryptography for security and privacy in wireless sensor networks," Networking and Telecommunications: Concepts, Methodologies, Tools, and Applications, Edited by: Hamid Nemati, IGI Global Publications, 2010, pp. 1449-1472.

5. **Dulal Kar** and V. V. Bapeswara Rao, "Hartley Transforms," Encyclopedia of Electrical and Electronics Engineering, pp. 642-650, John Wiley & Sons, Inc, 1998.

Conference Proceedings (peer reviewed)

1. Shuyi Zhao, Scott King, and Dulal Kar, "A tool for detection and analysis of a human face for aesthetical quality using mobile devices," Accepted for publication in the 22nd International Conference on Image Processing, Computer Vision, & Pattern Recognition, July 2018.
2. Srinivas Thota, Ajay Katangur, and **Dulal Kar**, "Fusion-based resource allocation algorithms for cloud computing," Proceedings of the 16th IEEE International Conference on Ubiquitous Computing and Communications (IUCC 2017), Guangzhou, China, December, 2017.
3. Marwa Hassan, Ajay Katangur, and **Dulal Kar**, "A secure body sensor network architecture with CP-ABE based fine-grained data access control," Proceedings of the Second International Conference on Advanced Wireless Information, Data, and Communication Technologies (AWICT 2017), Paris, November 2017.
4. Naveen Chada, **Dulal Kar**, and Ajay Katangur, "A framework for web applications security and response system," Proceedings of the 15th International Conference on Security and Management, July 2017. (Acceptance Rate: 25% - 28%)
5. Vijay Agamamidi, **Dulal Kar**, and Ajay Katangur, "Extraction of textual information from images using mobile devices," Proceedings of the 21th International Conference on Image Processing, Computer Vision, and Pattern Recognition, July 2017. (Acceptance Rate: 24% - 26%)
6. Ajay Katangur, Somasheker Akkaladevi, and **Dulal Kar**, "Application level encryption in Bluetooth," Proceedings of the 16th International Conference on Wireless Networks, July 2017. (Acceptance Rate: 24% - 26%)
7. Ajay Katangur, Somasheker Akkaladevi, and **Dulal Kar**, "Combining host and network-based intrusion detection system to mitigate insider threat," Proceedings of the 29th International Conference on Computer Applications in Industry and Engineering, September 2016. (Acceptance Rate: 33%)
8. Ajay Katangur, **Dulal Kar**, Vinay Chaitankar, and Somasheker Akkaladevi, "Dynamic analysis of malicious code and response system," Proceedings of the 11th International Conference on Security and Management, pp. 78-84, July 2013.
9. Zachary Seymour and **Dulal Kar,** "Finding partially link-disjoint paths in wireless sensor networks," Proceedings of the 19th IEEE European Wireless Conference, April 2013.
10. Clifton Mulkey, **Dulal Kar**, and Ajay Katangur, "Towards an efficient protocol for privacy and authentication in wireless networks," Proceedings of the 11th International Conference on Security and Management, July 2013. (Cited by: 5)
11. **Dulal Kar**, Swetha Pandala, and Ajay Katangur, "Improving performance of Transmission Control Protocol for mobile networks," Proceedings of the 10th International Conference on Wireless Networks, 2011. (Acceptance Rate: 23%)
12. Tinara Hendrix, Michael Bimberg, and **Dulal Kar**, "On energy efficiency of elliptic curve cryptography for wireless sensor networks," Proceedings of the 2011 International Conference on Security and Management, July 2011. (Acceptance Rate: 23%)
13. Samseker Akkaladevi, Ajay Katangur, and **Dulal Kar**, "Implementing security measures for portable devices," Proceedings of the 2010 International Conference on Wireless Networks, July 2010. (Acceptance Rate: 27%)

14. Geetha Sanapala and **Dulal Kar**, "SCIBED: A web-based testbed for wireless sensor networks," Proceedings of The 2010 International Conference on Internet Computing, July 2010. (Acceptance Rate: 29%)
15. Hung Ngo and **Dulal Kar**, "LPC vocoders for environmental monitoring using wireless sensor networks," Proceedings of the 2010 International Conference on Wireless Networks, July 2010. (Acceptance Rate: 27%)
16. Anthony Weitekamp, **Dulal Kar,** Mario Garcia, and George Tintera, "Symmetric Key Cryptography Using Synchronized Chaotic Systems," The 6th International Conference on Computing, Communications and Control Technologies, Orlando, 2008.
17. Felix Fuentes and **Dulal Kar**, "A palm vein authentication system", The 2nd Computer Security Conference, Myrtle Beach, April 2008.
18. **Dulal Kar,** Steven Mariani, and Randy DeLeon, "On hiding memory resident data," The 2nd Computer Security Conference, Myrtle Beach, April 2008.
19. Anthony Weitekamp, **Dulal Kar,** Mario Garcia, and George Tintera. "Synchronous key generation from chaotic systems," Proceedings of the 6th International Conference on Security and Management, July 2008. (Acceptance Rate: 29%)
20. Felix Fuentes and **Dulal Kar,** "A vein map biometric system," Proceedings of the 6th International Conference on Computing, Communications and Control Technologies, Orlando, 2008.
21. Gaurav Gaur and **Dulal Kar**, "Website conversion tool for visually challenged users," Proceedings of the 4th International Conference on Cybernetics and Information Technologies, Systems, and Applications. Orlando, July 2007.
22. Philip Wilson and **Dulal Kar**, "Strengthening security of Vigenère cipher," Proceedings of the Computer Security Conference, Myrtle Beach, April 2007.
23. Rafic Bachnak, Ramya Chakinarapu, Mario Garcia, and **Dulal Kar**, "Programming a microcontroller for data capture and display," Proceedings of the ISCA 16th International Conference on Software Engineering and Data Engineering (SEDE-2007), Las Vegas, July 2007.
24. Rafic Bachnak, Ramya Chakinarapu, Mario Garcia, **Dulal Kar**, and Tien Nguyen, "Real-time acquisition and display of data and video," Proceedings of the 7th WSEAS International Conference on Signal Processing, Computational Geometry, and Artificial Vision (ISCGAV'07), Athens, Greece, August 2007.
25. **Dulal Kar** and Randy DeLeon, "On fast estimation of network bandwidth," Proceedings of the 2006 International Conference on Communications in Computing (CIC'06), pp. 3-6, Las Vegas, June 2006.
26. **Dulal Kar** and Dennis Ma, "An application for automatic extraction of objects from digital images," Proceedings of the ISCA 21st International Conference on Computers and Their Applications, CATA-2006, CD-ROM, Seattle, March 2006.
27. **Dulal Kar** and **Dennis Ma,** "A tool for extraction of objects from digital images," Proceedings of the Conference organized by American Society for Engineering Education-Gulf-Southwest Section CDROM, Corpus Christi, March 2005.
28. **Dulal Kar,** "Optimal message routing in a distributed double loop network with faulty nodes and links," Proceedings of the International Conference on Computing, Communications and Control Technologies (CCCT'04), Austin, Texas, August 2004.
29. Rafic Bachnak, **Dulal Kar,** and Hesham Shaalan, "Digital systems laboratory for teaching and research," Proceedings of the American Society for Engineering Education Conference, CDROM, Salt Lake City, June 2004.

30. **Dulal Kar** and V. V. Bapeswara Rao, "Routing tables for message routing in distributed double loop networks", Proceedings of the ISCA 18th International Conference on Computers and Their Applications, CATA-2003, pp. 17-20, Honolulu, Hawaii, March 2003.
31. **Dulal Kar** and Pran Saha, "A parallel, operational amplifier based design of a selection circuit for rank-order filtering," Proceedings of the 2nd International Conference on Electrical and Computer Engineering (ICECE), pp. 296-299, December 2002. (Cited by: 5)
32. **Dulal Kar** and S. R. Subramanya, "A tree-based, constant-time rank-order algorithm for moving window filtering applications," Proceedings of the ISCA 15th International Conference on Computer Applications in Industry and Engineering, CAINE-2002, pp. 45-48, San Diego, California, November 2002.
33. **Dulal Kar,** "Pruning of a sliding window for rank-order filtering," Proceedings of the ISCA 17th International Conference on Computers and Their Applications, CATA-2002, pp. 98-101, San Francisco, California, April 2002.
34. **Dulal Kar,** "A fast sliding window median filtering algorithm," Proceedings of the International Conference on Intelligent Multimedia and Distance Education, pp. 169-173, June 2001.
35. **Dulal Kar,** "Wireless local area networks: ultimate freedom in teaching and learning anytime, anywhere with technology," Proceedings of International Conference on Education and Technology, Tallahassee, Florida, May 2001.
36. **Dulal Kar,** "Automatic characterization of computer programming assignments for style and documentation," Proceedings of International Conference on Education and Technology, Tallahassee, Florida, May 2001.
37. **Dulal Kar,** "A real-time software system for detecting plagiarism in programming assignments," Proceedings of International Conference on Education and Technology, Tampa, Florida, October 1999.
38. **Dulal Kar,** "Automatic detection of plagiarism in programming assignments," Fourth Regional Conference on Educational Technology, Fredericksburg, Virginia, May 1999.
39. **Dulal Kar,** V. V. Bapeswara. Rao, and Chi-Sang. Poon, "A high performance VLSI systolic array for computing projection operators," Proceedings of IEE International Symposium on Computer Architecture and Digital Signal Processing, 1989.

Papers Submitted for Publication:

1. Marwa Hassan, Ajay Katangur, and Dulal Kar, "A secure body sensor network architecture with CP-ABE based fine-grained data access control," Journal of Computer Networks, An Elsevier publication.
2. Srinivas Thota, **Dulal Kar**, and Ajay Katangur, "Fusion-based resource allocation algorithms for cloud computing," The 16th IEEE International Conference on Ubiquitous Computing and Communications (IUCC 2017), Guangzhou, China, December 2017.
3. Divya Ramidi, Ajay Katangur, and **Dulal Kar**, "Virtual machine migration and task mapping architecture for energy optimization in cloud," The 9th IEEE International Conference on Cloud Computing Technology and Science (CloudCom 2017), Hong Kong, December 2017.

Non-Refereed Publications

1. Zachary Seymour and **Dulal Kar**, "Finding Partially Link-Disjoint Paths in Wireless Sensor Networks," The 10th Annual S.U.R.F Symposium, Texas A&M University-Corpus Christi, August 9, 2012.

2. Jason Yu and **Dulal Kar**, "Intrusion Detection in Wireless Sensor Networks through Traffic Anomaly Identification," The 10th Annual S.U.R.F Symposium, Texas A&M University-Corpus Christi, August 9, 2012.
3. Rashad Tatum, Keith Zejdlik, and **Dulal Kar**, "Identity-Based Security Protocols for Mobile Wireless Sensor Networks," The 9th Annual S.U.R.F Symposium, Texas A&M University-Corpus Christi, August 4, 2011.
4. Tinara Hendrix, Michael Bimberg, and **Dulal Kar**, "Analyzing energy efficiency of elliptic curve cryptography for wireless sensor networks," The Eighth Annual S.U.R.F Symposium, Texas A&M University-Corpus Christi, August 5, 2010.
5. Vishal Monpara and **Dulal Kar**, "A Web-based course management system for assignment creation, submission, and peer evaluation," The 44th Annual ACET Conference, October 2008.
6. Steven Mariani, **Dulal Kar,** and Randy DeLeon, "Retrieving passwords from memory dumps," The 43rd Annual ACET Conference, October 2007.
7. Steve Mariani, **Dulal Kar**, Randy DeLeon,"Retrieving passwords from memory dumps," The 7th Annual Undergraduate Research Symposium, Texas A&M University-Corpus Christi, November 2007.
8. Randy DeLeon and **Dulal Kar**,"Fast estimation of network bandwidth," CASHI (Computing Alliance of Hispanic-Serving Institutions) Annual Meeting Poster Session 2006, University of Texas-El Paso, 2006.
9. Felix Fuentes and **Dulal Kar** "Estimation of internet path bandwidth using tcpdump," Student Conference for Research and Creative Arts, University of Houston-Clear Lake, 2005.
10. Jon Fisher and **Dulal Kar**, "Watermarking of digital documents for Internet delivery," Student Conference for Research and Creative Arts, University of Houston-Clear Lake, 2005.

Training/Certification

1. A two-week long capacity building workshop on computer and network security offered by **Rochester Institute of Technology**, funded by an NSF SFS grant, Summer 2007.

2. A three-day workshop on computer and network security, offered **by Rochester Institute of Technology**, May 25-27, 2005.

3. A month-long workshop on Information Assurance and Security, supported by National Science Foundation and conducted by **Carnegie Mellon University**, Pittsburgh, July 6 to August 2, 2003.

4. A week-long short course on Computer Networks – Services and Protocols conducted by Asian Institute of Technology, Bangkok, Thailand and Bangladesh University of Engineering and Technology, Dhaka, Bangladesh, April 16-22, 1987.

5. A week-long UNESCO (United Nations Educational, Scientific, and Cultural Organization) supported, seminar conducted by Computer Maintenance Corporation (CMC), New Delhi, India, November 17-21, 1986.

Courses Taught

Texas A&M University-Corpus Christi, Fall 1999 to Date

1. Applied Cryptography
2. Information Assurance
3. Computer Networks
4. Network Design and Management
5. Data Communication Systems
6. Design and Analysis of Algorithms
7. Algorithmic Processes
8. Algorithms
9. Parallel Computing
10. Computer Architecture
11. Advanced Computer Architecture
12. Operating Systems
13. Scientific Applications of Databases
14. Visual Programming Languages
15. Data Structures
16. Computer Organization and Assembly Language
17. Foundations in Programming and Problem Solving I
18. Foundations in Programming and Problem Solving II
19. Introduction to Problem Solving with Computers I
20. Introduction to Problem Solving with Computers II
21. Foundations of DBMS
22. Introduction to DBMS
23. Computer Literacy

Virginia Tech, Fall 1997 to Summer 1999 (Taught Over 2,000 Students)

1. Object-Oriented Software Design and Construction
2. Introduction to C programming
3. Numerical Computing
4. Computing for Business

Mountain State University, Fall 1993 to Summer 1997

1. Data Communications
2. Computer Architecture
3. Database Systems
4. Systems Analysis and Design
5. Management Information Systems
6. Data Structures
7. C programming
8. Assembly Language Programming
9. Visual BASIC Programming
10. RPG II Programming
11. Fundamentals of Microcomputer Applications

North Dakota State University, Fall 1987 to Summer 1993

1. Principles of Digital Systems
2. Probability Theory and Random Processes
3. Electrical Circuits
4. Electronics (Lab)
5. Digital Systems Design (Lab)

Bangladesh University of Engineering and Technology, 1982 to 1987

1. Data Communications
2. Assembly Language Programming
3. Microprocessors
4. Digital Systems
5. Operating Systems
6. Computer Architecture
7. Electronics
8. Circuits
9. Digital Electronics
10. FORTRAN Programming
11. COBOL Programming
12. Numerical Methods

North South University, Bangladesh, Summer 2000

Computing Concepts

Doctoral Advisory Committee Member

Tomas Espinosa (Curriculum & Instruction), "Faculty Sense of Efficacy for Culturally Responsive Literacy Instruction at Hispanic Serving Institutions: An Explanatory Sequential Mixed Methods Inquiry," In-Process (July 2018 - Present).

Lauren Hutchison (Coastal & Marine Systems Science), "Operationalizing Coastal Wetland Ecosystem Services for Enhanced Decision Making and Resilience," Ph.D., Fall 2016.

Master's Thesis Committee Chair

1. **Michael Montez**, "Modernizing classical quantum chemistry algorithms for fast computation," August 2016- Present.
2. **Clifton Mulkey**, "Identity Based Encryption Protocol for Privacy and Authentication in Wireless Networks," MS, Spring 2011.

Master's Thesis Committee Member

1. **Karthikeyan Gunasekaran**, "Map Generation and Trajectory Following for an Autonomous Mobile Robot System," MS, Spring 2018.
2. **Sai Vinay Teja Manikonda**, "Oil Spill Detection in SAR Images Using Meta-Heuristic Search Algorithms," MS, Spring 2018.
3. **Sadiskumar Vivekanandhan**, "Priority Weighted Round Robin Algorithm for Load Balancing in the Cloud," MS, Fall 2017.
4. **Erman Gurses**, "Source Identification of Leaks in Natural Gas Pipelines Using Real Time Parallel Image Fusion on Mobile GPUs," MS, Fall 2014.

5. **Ming Teng**, "Quantifying Percent Epifauna Coverage On Seagrasses Using Hyperspectral Imaging and Graphics Processing Units," MS, Fall 2013.
6. **Sachin Medavarapu**, "A Packet Marking Algorithm," MS, Summer 2013.
7. **Shanxian Mao**, "Top-K Answering Under Uncertain Schema Mappings," MS, Summer 2012.
8. **Yuzhe Wei**, "Ontology-based Top-K Global Schema Generation," MS, Spring 2012.
9. **Khoa Nguyen**, "Probabilistic Top-k Query Processing," MS, Spring 2012.
10. **Huy Tran**, "A Massively Parallel Line Simplification Algorithm Using an Associative Computing Model," MS, Fall 2011.
11. **Bhanu Kamapantula**, "Multi-Metric Adaptive Routing Algorithm for Underwater Sensor Networks", MS, Summer 2011.
12. **Irvan Hendrik**, "Combining Host and Network-Based Intrusion Detection System to Mitigate Insider Threat," MS, Summer 2011.
13. **Marwa Hassan**, "A Secure Body Sensor Network Architecture with CP-ABE Based Fine-Grained Data Access Control," Spring 2011.

Master's Project Committee Chair

1. **Christina Shiny Pulipati**, "Navigate Safe: Flood-Safety Navigation and Management System Using Android Platform," MS, August 2018.
2. **Rahul Yerramsetty**, "Intelligent Lost and Found System Using Natural Language Processing," MS, August 2018.
3. **Ravi Teja Neela**, "Smart Assistant for VIP: Android Application," MS, August 2018.
4. **Kusa Koushik Reddy**, "Video Steganography Using Clustering Algorithm," MS, May 2018.
5. **Md Mominul Islam**, "SmartTraGuide: An Integrated Travel Application for Android When User on Move," MS, May 2018.
6. **Srinivas Thota**, "Fusion-based Load-aware Resource Allocation on Cloud," MS, Summer 2017.
7. **Sahana Alikanti**, "Appointment Scheduler and Manager – An Android Application," MS, Spring 2017.
8. **Smaran Aerramsetty**, "Android Application Prototype for University Council of Student Organization Services," MS, Spring 2017.
9. **Lakshmi Gottumukkala**, "Android Application for Managing Attendance, Grades, and Healthcare Services," MS, Spring 2017.
10. **Naveen Chada**, "Web Application Security and Response System," MS, Fall 2016.
11. **Anusha Nakka**, "A Comparative Study and Simulation of Audio Steganography Schemes," MS, Summer 2016.
12. **Mounika Bachina**, "An Android Application for Collaborative and Interactive Task Management," MS, Spring 2016.
13. **Prathyusha Kosuru**, MS, "An Android Application for Location-Based Disaster Evacuation System," MS, Spring 2016.
14. **Shilpa Reddy**, "Customized Security Mechanism for RESTful Web Service Communication", Spring 2016.
15. **Srivalli Devarakonda**, "An Authentication System to Avoid Phishing and Client Side Attacks," MS, Spring 2016.

16. **Archanaa Jayakumar**, "Intelligent Pricing for Used Phones Using Artificial Neural Networks," MS, Fall 2015.
17. **Fawwad Mohammed**, "Implementation of a Prototype to Illustrate the Usage of Web Data Mining in E-Commerce," MS, Fall 2015.
18. **Madhura Kalakuntla**, "An Android Application for University Career Services," Fall 2015.
19. **Rakesh Ravva**, "Cryptographic System for File Sharing from Cloud Storage," MS, Fall 2015.
20. **Vijay Agamamidi**, "Android Application to Get Quick Inputs from Images," Fall 2015.
21. **Vijaya Jaliparthy**, "Personalized Mobile Search Engine Using PRRA Algorithm," MS, Fall 2015.
22. **Sahithi Kotha**, "SociALL: An Android Application to Access and Manage Multiple Social Networks," MS, Summer 2015.
23. **Bradley Hannah**, "Active Directory Management," Spring 2015.
24. **Kazim Hussain**, "Android Application for Safety Awareness of Road Travelers," Spring 2015.
25. **Mounik Vanguri**, "Analyzing Reputation by Mining Feedback Comments," Spring 2015.
26. **Niharika Medaboina**, "Implementation of Cloud Repository for Secure Data Sharing," Spring 2015.
27. **Satyanarayanamurthy Kota**, "A Prototype of Recommendation Engine Using Big Data Analytics," MS, Spring 2015.
28. **Niharika Udumula**, "A Location Aware Quality of Services (QOS) Base Recommendation System for Web Services," MS, Spring 2015.
29. **Cuong Ngo**, "Secure Voting System Using Paillier Homomorphic Encryption," MS, Fall 2014.
30. **Kwadwo Amoako-Baah**, "Video Steganography," MS, Summer 2013.
31. **Nhu Vo**, "A Multi -Threshold Based Scheme for Audio Steganography," MS, Spring 2013.
32. **Rakesh Srirangam**, "A Novel Steganographic Tool for Multi-level Protection," MS, Summer 2012.
33. **Geetha Sanapala**, "Web-Based Testbed for Wireless Sensor Networks," MS, Summer 2010.
34. **Hung Ngo**, "LPC Vocoders for Environmental Monitoring Using Wireless Sensor Networks," MS, Summer 2010.
35. **Soumya Kancheti**, "Comparative Study of Elliptic Curve Cryptography and RSA in Constrained Environment," MS, Spring 2010.
36. **Swetha Pandala**, "Modified Mobile Transmission Control Protocol," Spring 2010.
37. **Rajesh Kanisetti,** "Design and Implementation of a Text-to-Speech Extension for Internet Browser," Spring 2009.
38. **Bimbi Koduru,** "A Steganographic Application Using Audio Files," Summer 2009.
39. **Frank Fonseca,** "Wireless Network Security Intrusion Detection," MS, Fall 2008.
40. **Sumit Agarwal,** "English-Hindi and Hindi-English Machine Translation," MS, Fall 2007.
41. **Sheshidhar Odeti,** "Wave Steganography," MS, Fall 2007.
42. **Reena Sodiny**, "Cartographic Visualization for the State of Texas," MS, Summer 2007.

43. **Sunil Kilaru,** "Developing Instructional Technology Using the Tablet PC," MS, Summer 2007.
44. **Randy DeLeon,** "Securing Sensitive Data in Cookies," MS, Spring 2007.
45. **Felix Fuentes,** "Biometrics and Vein Map Authentication," MS, Spring 2007.
46. **Srinivas Jaini,** "Design and Implementation of Java Platform for Web Service Based Application Development," MS, Fall 2006.
47. **Krishna R. Boddugari,** "TIGCALL: Call Center Management Software," MS, Summer 2006.
48. **Gaurav Gaur,** "A Tool for Conversion of a Graphic Intensive Website to Text Browser Friendly Website," MS, Spring 2006.
49. **Vishal Monpara,** "A Web-based System for Assignment Creation, Management, and Evaluation," MS, Spring 2006.
50. **Amit Agarwal,** "Content Based Image Retrieval," MS, Spring 2006.
51. **Abhilash Uppala,** "Design and Implementation of a User Friendly Geodatabase System for the State of Texas," MS, Spring 2006.
52. **Himanshu Singh Pundir,** "Immediate Assessment of a Class Lecture Using a Handheld Device," MS, Spring 2006.
53. **Kiran Jana,** "Design and Implementation of Online Grading and Tracking System," MS, Fall 2005.
54. **Ashwani Tomer,** "Mapping and Monitoring of Live Oak Peninsula, Texas," MS, Fall 2005.
55. **Naresh K. P. Shroff,** "Task Management System on Pocket PC," MS, Fall 2005.
56. **Gnan Mekala,** "Task Management System," MS, Fall 2005.
57. **Samuel Amoako-Atta,** "Geographic Information System Application for Preventing Port Ballast Water Bioinvasions," MS, Spring 2005.
58. **Ramadevi Jaini,** "Wireless Computer Help Desk System," MS, Fall 2004.
59. **Bhargavi Hiremagalur,** "WLAN Traffic Grapher Using Simple Network Management Protocol (SNMP)," MS, Fall 2004.
60. **Bin Zhu,** "Inductively Coupled Plasma (ICP) Water Sample Analysis Using a Data Automation System," MS, Summer 2004.
61. **Srikanth Turaga,** "Online Grading System," MS, Summer 2004.
62. **Anitha Nalluri,** "Data Mining Tool for Intrusion Detection," MS, Summer 2004.
63. **Krishna Vangala,** "Information Management System for Graduate Studies and Research," MS, Summer 2004.
64. **Krishna Reddy Daggula,** "WinFind, A Tool to Measure the Bandwidth of Asymmetric Links on Internet', MS, Fall 2003.
65. **Visrunkala S. Kasba,** "A Web-based Network Management Tool Using Simple Network Management Protocol (SNMP)," MS, Fall 2003.
66. **Dennis Ma,** "Digital Image Object Extraction," MS, Summer 2003.
67. **Jin T. Bohannon,** "Design and Implementation of an Accounting Database Assistance System," MS, Fall 2002.
68. **Abhijeet Trivedi,** "Design and Implementation of Read, Review, and Assess System," MS, Spring 2002.
69. **Rui Shen,** "Design and Implementation of WinTrace - An Internet Path Characterization Tool," MS, Fall 2001.

Master's Project Committee Member

1. **Hoang Bui**, "Sentiment Analysis for Live Twitter Stream," MS, Summer 2017.
2. **Sri Charan Nimmagadda**, "Emotion Based Music Player," MS, Summer 2017.
3. **Divya Ramidi**, "Virtual Machine Integration Migration and Task Mapping Architecture for Cloud," MS, Summer 2017.
4. **Akshay Chintala**, "Advanced Messenger- Cal-IM," MS, Summer 2016.
5. **Aravind Thalakokkula**, "A Prototype for Detecting Users' Interests Based on Search Behavior," MS, Summer 2015.
6. **Avinash Thammineni**, "Implementation of Simulation to Enhance Wireless Ad-hoc Networks Performance Using the Medium Access Control Protocol," MS, Summer 2015.
7. **Bhagyasree Todunupuri**, "Detection of Misbehavior in Delay Tolerant Networks," Summer 2015.
8. **Cagri Ozen**, "Collision Avoidance for Unmanned Aircrafts Using an Intelligent Software," MS, Summer 2015.
9. **Chaitanya Maddukuri**, "User-Guided Information Extraction Based on Webpage Layout," Summer 2015.
10. **Nizamuddin Mohammed**, "Call Answering Malicious Application to Understand Vulnerability of Android Telephony Frameworks," MS, Summer 2015.
11. **Paramjoth Chahal**, "Sentiment Analysis of Data Collected from Social Media for Improving Healthcare," MS, Summer 2015.
12. **Prem Racharla**, "Temporal Lock for Android Applications," MS, Summer 2015.
13. **Rajesh Patwari**, "Evidence Based Sentiment Analysis of Real Time Data from Twitter," MS, Summer 2015.
14. **Shahid Sultan**, ""Monitoring HTTP based Command and Control Botnets in Network Traffic Using Bot-Sniffer," MS, Spring 2015.
15. **Anvesh Paidipala**, "Doctor Patient Communication System," MS, Spring 2015.
16. **Gopal Gurram**, "Locale-Reminder: An Android Application, MS, Spring 2015.
17. **Prateek Shivraj**, "Rental Property Management: An Android Application," Spring 2015.
18. **Pratyusha Katepally**, "Security Scheme Implementation in Mobile Information Centric Networks," MS, Spring 2015.
19. **Rohini Kanneboina**, "Travel Package Recommendation System," MS, Spring 2015.
20. **Sandeep Kanaparthi**, "Calendar+: An Android Application to Manage Multiple Calendars," MS, Spring 2015.
21. **Bilal Siddiqui**, "Travel App Generating Imperative Informatics for Enhanced End-User Experience," MS, Fall 2014.
22. **Shuyi Zhao**, "An Android Application for Facial Aesthetic Analysis," MS, Summer 2014.
23. **Johan Emerensiana**, "A Prototype Android Food Ordering Application," MS, Summer 2013.
24. **Srividya Venumbaka**, "An Enhanced Feature - based Sentiment Analysis System," MS, Spring 2013.
25. **Aditya Cheruvu**, "Email Spam Detector: A Tool to Monitor and Detect Spam Attacks," MS, Fall 2012.
26. **Anudeep Kandi**, "Design and Implementation of a Tool to Help Computer Forensics Instructor to Demonstrate Common Data Hiding Techniques," MS, Fall 2012.

27. **Deepthi Jambula**, "Implementation of a Prototype to Detect Unusual Behaviors on a Network," MS, Fall 2012.
28. **Ashwini Achar**, "Software Architecture Tool to Detect and Prevent Intrusion Scripting in a Network," Summer 2012.
29. **Kamalendar Kotha**, "Visual Cryptography Tool for Emdedded Halftoned Shares," MS, Spring 2012.
30. **Karthik Kommaraju**, "Data Security in Cloud Computing Using Encryption," MS, Spring 2012.
31. **Sudhir Chennuri** "Design and Implementation of an Integrated Forensic Tool for Web Browser Analysis," MS, Spring 2012.
32. **Srikanth Padakanti**, "Rootkits Detection Using Inline Hooking," Spring 2012.
33. **Praneeth Koralla**, "Mobile Geo-Tagging in Social Networks with Android," MS, Fall 2011.
34. **Yan Zhang,** "Multi-hop Qualitative Direction Estimation in Ad-hoc Wireless Sensor Networks," Summer 2011.
35. **Shravani Kantamneni**, "Personalized Dataspace Profiling," MS, Spring 2011.
36. **Pavani Dugyala**, "Data Integration of Ocean Observatory Systems," Fall 2010.
37. **Rakesh Tatiparthy,** "Implementation of a Personalized Dataspace Management Systems in iMeMex," Fall 2010.
38. **Eric Schendel,** "Archiving with Athamas: A Framework for Optimized Handling of Domain Knowledge". Spring 2010.
39. **Michael Sheets,** "An Implementation and Performance Comparison of the Parallel Particle Swarm Optimization Algorithm," MS, Fall 2009.
40. **Himabindu Keesara,** "Location Sensing Mobile System for Campus Touring," MS, Spring 2009.
41. **Hayford A. Osei,** "Voice Remote Computer Control via PSTN," MS, Fall 2009.
42. **Aslam Shaik,** "Super Peer Based Routing Strategies for RDF Based Peer to Peer Networks," Spring 2009.
43. **Anil Kumar Nalluri,** "Spatio-Aware Data Integration of Ocean Observatory Systems," MS, Fall 2009.
44. **Bhavani Sunke**, "Research and Analysis of Intrusion Detection System Tools," MS, Fall 2008.
45. **Gonzalo Villegas,** "Analysis of Tools for Conducting Wireless Penetration Testing," MS, Fall 2008.
46. **Eduardo Arce,** "Use of Forensic Software Tools to Acquire Evidence from Mobile Devices," MS, Fall 2008.
47. **Chunhui Jin,** "Peer to Peer Database Integration," MS, Summer 2008.
48. **Rockwell Martin,** "Guiding the Blind with Bluetooth and Java," MS, Spring 2008
49. **Ramakrishna R. Vodeti,** "Study of Intrusion Detection Tools to Avoid Phishing," MS, Fall 2007.
50. **Kiran Vupalla,** "Prototype Design of Air Ticket Purchase Application for Symbian OS - based Smart Phones," MS, Fall 2007.
51. **Anthony Weitekamp,** "Secret Symmetric Key Elliptic Curve Diffie-Hellman Ephemeral Encryption Protocol," MS, Spring 2007.
52. **Tejashree Tendolkar,** "Content-Rich Web Page Segmentation," MS, Fall 2006.
53. **Ramya Chakinarapu,** "Programming a Controller for Video Conversion and Text Data Overlay," MS, Fall 2006.

54. **Le Liu,** "The Design and Implementation of a Visual Segmentation-based Data Extraction Algorithm on Web Pages," MS, Summer 2006.
55. **Daniel Davis,** "An Improved Control System for Mobile, Marine Sensor Platforms," MS, Spring 2005
56. **Randy Cisneros,** "Dictionary-based Password Auditor for UNIX Systems," MS, Spring 2005.
57. **Aijaz Ahmed,** "Signature-based Network Intrusion Detection System Using JESS (SNIDJ)," MS, Spring 2004.
58. **Rakesh B. Gujjarlapudi,** "Enrollment and Management Student Recruitment System," MS, Spring 2004.
59. **Manjula Chokkarapu,** "Management System for Patient Information and Insurance Billing," MS, Summer 2004.
60. **William A. Jackson,** "Robotic Arm Test Module Simulation," MS, Summer 2004.
61. **Wei Yu Chen,** "Advanced Petroleum Recovery Solution Inc. Well-logging Digitization Software," MS, Summer 2004.
62. **Ming Lai,** "Well-Logging Analysis System," MS, Fall 2004.
63. **Shiraz Ahmed,** "Electronic Learning in Nursing Education," MS, Fall 2004.
64. **Ravinder S. Rawat,** "Developing Geographical Information System (GIS) Real-time Web Portal for Monitoring of Marsh Habitat in Galveston Bay," MS, Fall 2003.
65. **Jeremy D. Zapata,** "A Learning Aggregator – A Bayesian Classification System for Online Syndication," MS, Fall 2003.
66. **Brian H. McCord,** "Predicting Stock Trending in a Financial Market with Neural Networks and Genetic Algorithms," MS, Summer 2003.
67. **Laura McCord,** "Issues and Techniques of Data Visualization for Water Levels in the Corpus Christi Bay," MS, Fall 2003.
68. **David D. Barth,** "University Course Scheduling Using a Genetic Algorithm," MS, Summer 2003.
69. **Brian H. McCord,** "Predicting Stock Trending in a Financial Market with Neural Networks and Genetic Algorithms," MS, Summer 2003.
70. **Krishna B. Vommi,** "Inventory Control Using Pocket PC," MS, Fall 2002.
71. **Harold Marksbury,** "A Study of the Effectiveness of Commercial Usability Methods When applied to a Military Web Environment," MS, Spring 2002.
72. **Roger Moore,** "The Design and Implementation of a Sales and Marketing Database System," MS, Summer 2002.
73. **Mathew Johnson,** "Development of an Intelligent Autonomous Robotic System Using a Hybrid Control Architecture and Enhanced Topological Mapping," MS, Fall 2001.
74. **Carlos Mendieta,** "A Comparison of Artificial Neural Network Models for Predicting Tide Levels," MS, Fall 2001.
75. **Ashwin Patel,** "Library Resources-Selection System," MS, Spring 2001
76. **Maurice Afram,** "Incorporation of Aural Learning Style in C/C++ Programming Environment," MS, Spring 2001.
77. **Maria Bondarenko,** "Web-Based Auction System," MS, Spring 2001.
78. **Maruthi Dantu,** "Near Real-time Reporting System for the Model Railroad System Located in the Real-time Computing Laboratory," MS, Spring 2001.
79. **J. Frederick Brabham,** "Development of a Cross-Platform, Translatable, Personalized Web Service for Training Air Wing Four's Training Management System 2," MS, Spring 2001.

80. **Prashant Gandhi,** "Web-Based Employee Work-Time Scheduling System," MS, Spring 2001.
81. **Ramesh Kathuroju,** "Design and Implementation of an Automated Weather Station Using a Microcontroller," MS, Spring 2000.

Supervisor of Undergraduate Research Fellows:

Jon Fisher (2005), Felix Fuentes (2005-2006), Randy DeLeon (2006), Steven Mariani (2006-2008), Tinara Hendrix (2010), Michael Bimberg (2010), Rashad Tatum (2011), Keith Zejdlik (2011), Zachary Seymour (2012), and Jason Yu (2012).

Editorial Review Board Member

1. **Editor,** Journal of Network and Computer Applications, Published by Elsevier, 2011-2016.
2. **Associate Editor,** International Journal of Distance Education Technologies, Published by IGI Global, 2008-2011.

Grant Proposal Reviewer/Panelist

1. **Reviewer,** National Science Foundation, Centers of Research Excellence in Science and Technology (CREST) Program, 2013.
2. **Panelist,** National Science Foundation, Improving Undergraduate STEM Education: Education and Human Resources (IUSE: EHR) Program, 2015.
3. **Panelist,** National Science Foundation, Scholarships for Science, Technology, Engineering, and Mathematics (S-STEM) Program, 2016.
4. **Panelist**, National Science Foundation, Scholarships for Science, Technology, Engineering, and Mathematics (S-STEM) Program, 2017.
5. **Proposal Reviewer**, North Dakota EPSCoR program, 2000.

Journal Article/Book Reviewer

1. IEEE Transactions on Signal Processing Journal.
2. IEEE Transactions on Circuits and Systems Journal.
3. Journal of Network and Computer Applications. (2011 - Present)
4. Journal of Supercomputing. (2011 - Present)
5. International Journal of Network Security. (2010 - Present)
6. John and Wiley Publishing, 2008.
7. Communications of the ACM, 2007.
8. Elsevier Publishing Company: Digital Signal Processing Journal, 2005.
9. Communications of the ACM, 2005.
10. Elsevier Publishing Company: Digital Signal Processing Journal, 2004.

Conference Session Chair

1. WSEAS (World Scientific and Engineering Academy and Society) International Conference on Signal Processing, Robotics, and Automation, 2007.
2. International Conference on Cybernetics and Information Technologies, Systems and Applications, 2007.
3. First Annual Computer Security Conference, 2007**.**
4. International Conference on **Computing, Communications and Control Technologies: (CCCT 2004**)**.**
5. International Conference on Intelligent Multimedia and Distance Education, 2001.

Conference Committee

1. Second International Conference on Informatics, Electronics, and Vision, Dhaka, Bangladesh, March 2013.
2. ISCA (International Society for Computer Applications) International Conference on Computers in Industry and Engineering, CAINE-2008.
3. Second Annual Computer security conference, 2008.
4. ISCA International Conference on Computers and Their Applications, CATA-2007.
5. ISCA International Conference on Computers in Industry and Engineering, CAINE-2007.
6. ISCA International Conference on Computers and Their Applications, CATA-2006.
7. ISCA International Conference on Computers in Industry and Engineering, CAINE-2006.
8. ISCA International Conference on Computers and Their Applications, CATA-2006.
9. ISCA International Conference on Computers and Their Applications, CATA-2005.
10. ISCA International Conference on Computers in Industry and Engineering, CAINE-2004.
11. ACM Symposium on Applied Computing, SAC 2005: Multimedia and Visualization, 2005.
12. ISCA (International Society for Computer Applications) Conference on Computer and Their Applications (CATA-2004), Seattle, March 2004.
13. ISCA Conference on Computer Applications in Industry and Engineering (CAINE-2003), Las Vegas, November 2003.
14. ISCA Conference on Computer Applications in Industry and Engineering (CAINE-2002), San Diego, November 2002.
15. International Conference on Computers and Information Technology, January 2001.

Conference Paper Reviewer

1. IEEE Computer Society 2009 International Conference on Information Technology
2. ACM Innovation and Technology in Computer Science Education Conference, ITiCSE-2009**.**
3. ACM SIGCSE Conference, 2009.
4. ACM Innovation and Technology in Computer Science Education Conference, ITiCSE-2008**.**
5. ASEE Conference, 2007.
6. ACM Innovation and Technology in Computer Science Education Conference, ITiCSE-2007**.**
7. ACM Innovation and Technology in Computer Science Education Conference, ITiCSE-2006**.**
8. ACM SIGCSE Conference, 2006.
9. Consortium for Computing Sciences in Colleges: 16th Annual South Central Conference, 2006.
10. ASEE Conference, 2006.
11. ACM Symposium on Applied Computing (SAC-2004), Cyprus, March 2004.
12. ACM Innovation and Technology in Computer Science Education Conference, 2005**.**
13. ACM Symposium on Applied Computing, SAC 2004: Multimedia and Visualization, 2004.
14. Consortium for Computing Sciences in Colleges: 15th Annual South Central Conference, 2005.
15. The Seventh Annual Conference on Innovation and Technology in Computer Science Education, 2002.
16. The ACM Seventh Annual Conference on Innovation and Technology in Computer Science Education, 2003.

17. Consortium for Computing in Small Colleges: 14th Annual South Central Conference, 2003.
18. Consortium for Computing in Small Colleges: 13th Annual South Central Conference, 2002.
19. The ACM Sixth Annual Conference on Innovation and Technology in Computer Science Education, 2001.
20. Consortium for Computing in Small Colleges: 12th Annual South Central Conference, 2001.
21. Consortium for Computing in Small Colleges: 11th Annual South Central Conference, 2000.
22. Consortium for Computing in Small Colleges: 11th Annual South Central Conference, 2000.
23. The ACM Symposium on Applied Computing (SAC-1996), Philadelphia, 1996.

University Service

1. Council of Principal Investigators and Research Administrators, (August 2015 – 2017).
2. Research Computing Task Force, (May 2016 – Present).
3. Graduate Council, (September 2015 – Present).
4. Faculty Senate, Texas A&M University-Corpus Christi, (May 2013 – May 2015)
5. Student Hearing & Appellate Board, (September 2013 – August 2014).
6. Academic Standard Grievance Committee, (2008 - 2014).
7. Graduate Council, 2004 - 2007.
8. Board of Directors, TAMUCC Women's Center, 2004.
9. University Undergraduate Admissions Committee, 2004 to 2007.

College Service

1. Promotion and Tenure Committee, (September 2018 - August 2019).
2. Research Enhancement Committee, (September 2018 - August 2019).
3. Scholarship and Award Committee, (September 2017 - August 2018).
4. Faculty Secretary, School of Engineering and Computing Sciences, (September 2015 – August 2016).
5. Research Enhancement Committee, 2004-2005.
6. Workload Release Committee, 2004-2005.
7. First-year students orientation sessions, 1999 to 2003.

Departmental Service

1. Promotion and Tenure Committee, (**Chair,** September 2018 - Present).
2. Computer Science Tenure Track Faculty Search Committee, (**Chair,** September 2018 - August 2019).
3. Computer Science ABET Steering Committee, (August 2013 - Present).
4. Computer Science Faculty Peer Teaching Evaluation, (2017 - 2018).
5. Search Committee for Faculty Positions, (September 2012 - August 2018).
6. Promotion and Tenure Committee, (September 2005 - August 2018).
7. Computer Science Graduate Studies Committee, (**Chair**, September 2017 - August 2018).
8. Search Committee for Visiting Assistant Professor Position in Computer Science, (**Chair,** Summer 2017).
9. **CAE Liaison**, Center of Academic Excellence in Information Assurance (IA)/Cyber Defense (CD) Designation (by NSA), (September 2015 – Present).
10. Computer Science Endowed Chair Search Committee, (September 2014-May 2015).
11. Research Committee, Department of Computing Sciences, (**Chair,** August 2015 – May 2016).

12. Computer Science Graduate Program Self-Study Committee, (**Chair,** October 2014 – January 2015).
13. Computer Science Graduate Studies Committee, (**Chair,** September 2013 – September 2015).
14. Computer Science ABET Steering Committee, (August 2013 - Present).
15. Computer Science Graduate Admissions Committee.
16. Promotion and Tenure Committee, (September 2005 - Present).
17. External Funding Committee, (**Chair,** 2009 – 2011).
18. Computer Science Graduate Assistant Program, (**Coordinator**, 2004-2008).
19. Computer Science Undergraduate Program Review Committee for ABET Accreditation, (**Chair**, 2004 - 2008).
20. Computer Science Graduate Studies Committee, (**Chair,** 2006-2007).
21. Affinity Research Group for Research in Networking and Security, (**Chair,** 2007- 2009).
22. Departmental Seminar Series, (**Coordinator,** 2006-2007).
23. Computer Science Graduate Studies Committee (2008-2009).
24. Departmental Computer Security Committee/Board, (2006-2007).
25. Promotion and Tenure Committee, (2005 – Present).
26. Computer Science Faculty Search Committee, (2001, 2002, 2005, 2006).
27. 120-hour CS Curriculum Committee, (2005).
28. CAMS Manual Writing Committee, (2003-2005).
29. CAMS Curriculum Committee, (**Chair**, 2004-2005).
30. Engineering Technology Faculty Search Committee, 2001– 2002.
31. Computer Science Graduate Program Review Committee, 2001.

Community or Other Service

1. Computer Science Club, (**Advisor,** September 1, 2012 - Present)
2. **External Reviewer** for Tenure and Promotion, University of Houston-Victoria, (2014).
3. IEEE Standard 1910 Working Group, (January 2014 – Present).
4. Poster Presentations by Students, International Workshop on Security and Privacy Analytics, University of Houston, (**Judge,** 2015).
5. Participations on Island Days

Virginia Tech

- **Member,** Undergraduate Program Committee in the Department of Computer Science.
- **Faculty Advisor,** Bangladesh Student Association at Virginia Tech.
- **Member,** Networking Research Group (NRG) led by Dr. Marc Abrams and Dr. Edward Fox.

Mountain State University, West Virginia

- **Member,** Student Support Services Committee.
- **Member,** Research Enhancement Committee.

Professional Affiliation:

- Association for Computing Machinery (ACM).
- Institute of Electrical and Electronics Engineers (IEEE)

Awards/Honors:

- Nominated for National Collegiate Engineering Award, U.S.A.
- University Merit Scholarship, 1979-81, Bangladesh.
- National Talent Scholarship, 1975-77, Bangladesh.