Group Members

- **Current Members**

  1. Tauhid Rahman Dewan; Ph. D.; Medical Image Processing; expected to graduate by the Spring of 2028.
  2. Safayet Islam; Ph. D.; XAI; expected to graduate by the Spring of 2029.
  3. Somak P. Shivlani; M. S.; Novel DNN Evaluation Metrics; expected to graduate Spring 2026.

- **Past Members**

  1. Chair; A Voice-Data Integration Protocol for Open-Ring/Active-Bus Networks; Felix E. Quevedo; M.S.; 1990.
  2. Chair; Optimal Broadcasting on the Star Graph; Victor E. Mendia; M.S.; 1990.
  3. Chair; Design and Analysis of Parallel Algorithms for Dynamic Programming Problem and Fuzzy Arithmetic; Hassen Dhrif; M.S.; 1990.
  4. Chair; Product Networks: A Family of Graphs from Group Model; Wing Tong; M.S., 1990.
  5. Chair; Incremental Concept Formation Using Fuzzy Set Theory; Bettina Schmidt; M.S.; 1991.
  6. Chair; A Language Based Simulator for Connectionist Models; Alejandro Jose Roman; M.S.; 1991.
  7. Chair; Performance Study of Linearly Connected Parallel Machines Through Simulation; Lydia Fernandez; M.S.; 1992.
  8. Chair; Handwritten Character Recognition Through Neural Networks; Andres Guevara; M. S.; 1992.
  9. Chair; Back Propagation Algorithm with Controlled Oscillation of Weights; Yolanda M. Pirez; M.S.; 1992.
  10. Chair; IMACS: An Intelligent Melodic Analysis and Composition System; Kip Irvine; M.S.; 1995.
  11. Chair; Neural Network Pruning using Principal Component Analysis; Meena K. Kunjathapatham; M. S.; 1998.
  12. Chair; A CORBA-Based Middleware Architecture for Building Open and Interoperable Geographic Information Systems; Steven H. Wong; M.S.; 2000.
  13. Chair; A Novel Cache Distribution Heuristic Algorithm for a Mesh of Caches and Its Performance Evaluation; Jorge Escorcia; M.S.; 2000.
  14. Chair; A Method to Study Bandwidth Requirement in a Hierarchical Caching Network and Its Performance Evaluation; Gaolai Peng; M.S.; 2000.
  15. Chair; A Study of Channel Allocation Schemes for the Improvement of QoS in Cellular Networks; Satya Kovvuri; M.S.; 2000.
  16. Chair; Iterative Algorithms for Performance Evaluation of Wireless Networks; Dmitry Fedyanin; M.S.; 2000.
  17. Chair; Design and Implementation of a Medical Information System; Xiaorong Mei; M. S.; 2001.
  18. Chair; A Method to Improve Internet Caching by Efficient Cache Distribution; Naveed Ahmend; M.S.; 2001
  19. Chair; Novel Heuristic Algorithms for Virtual Path Network Design and Their Performance Evaluation; Huaichen Yang; M.S.; 2002.
  20. Chair; Dynamic Adjustment of Call Pre-Blocking Parameter Using Fuzzy Associative Memory; M.S.; Sivaramakrishna Mopati, M.S.; 2002.

21. Chair; FAM-Based Call Admission Control for Interference Limited Mobile Cellular CDMA Systems; M.S.; Rupenaguntla Naga Satish Chandra; 2003.

22. Chair; Minimum Expected Number of Hops Routing for IEEE 802.11 Based Ad Hoc Networks; M.S.; Petr Kraus; 2003.

23. Chair; Domain Wise Route Optimization in Mobile IP; M. S.; Nizar Tyrewalla; 2003.

24. Chair; Packet Delivery Delay Estimation for Wireless Ad Hoc Netwprks; M.S.; Heberto Del Rio; 2004.

25. Chair; Throughput Maximization in Wireless Ad Hoc Networks by Scheduling End-to-End Flows; M.S.; Avishek Ghosal; 2004.

26. Chair; Performance Analysis and Enhancement of IEEE 802.11 Distributed Coordination Function; M. S; Tushnim Bhattacharyya; 2005.

27. Chair; Concurrent Multipath Transport Protocols; M.S.; Snigdhadeb paul; 2006;

28. Chair; DRPIT: Data Rate PSNR Information Computation and Its Application to Variable Rate Video Streaming; M.S.; Harendra Narayan; 2007

29. Chair; Concurrent Multi-Path Real-Time Transmission Control Protocol; M.S.; Anand Jayram; 2007

30. Chair; An Algorithm for Mining Adverse-Event Datasets for Detection of Post Safety Concern of a Drug; M.S.; Debashis Biswas; 2010

31. Chair; Scalable Self-Tuning Implementation of Smith-Waterman Algorithm for Shared-Memory Multicore Computers; M.S.; Faisal Sikder, 2014

32. Chair; Higher-Capacity Wireless-Connection Route Selection Algorithm for Automobiles; M.S.; Brandon Sato; 2014

33. Chair; Secure Data Aggregation for Sensor networks in the Presence of Collusion Attack Using Local Outlier Factor; M. S.; Anes Yessembayev; 2015

34. Member; Learnable Knowledge for Autonomous Agents; Ph. D.; Saminda Abeyruwan; 2015

35. Member; Adaptive Dynamic Walking and Motion Optimization for Humanoid Robots; Ph. D.; Andeas Seekircher; 2015

36. Member; Automated Theorem Proving by Translation to Description Logic; Ph. D.; Negin Arharmi; 2015

37. Chair; Secure Data Aggregation for Sensor networks in the Presence of Collusion Attack Using Local Outlier Factor; M. S.; Anes Yessembayev; 2015

38. Chair; A Model-Based Sensor Database for Internet of Things; M. S.; Parul Maheshwari; 2016

39. Chair; Human Fall and Activity Detection, and Muscle Spasm Identification; Ph. D.; Faisal Sikder; 2017

40. Member; Lossless Compression of Images; Basar Koc; Ph. D.; 2017

41. Member; DTMF Audio Communication for NAO Robots; Kyle Poore; M.S.; 2017

42. Member; Learning and Reasoning with Imperfect Data; Janith Heedeni P. Don; Ph. D.; 2018

43. Member; A framework for efficient implementation and effective visualization of Dempster–Shafer belief theoretic computations for reasoning under uncertainty; Ph. D.; Lalintha G. Polplintya; 2019

44. Chair; Novel Feature Measures for Deep Neural Network Training and Evaluation; Nathaniel Dean; Ph. D.; 2024

45. Chair; Collin D. Connors; PBL: System for Creating, Maintaining, and Sharing Personal Blockchain Ledgers; 2025.

Served as member of 25 Ph. D. dissertation committees and 23 M. S. thesis committees in various departments.