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EDUCATION

1. **Doctor of Philosophy**, Department of Computer Science & Engineering, Indian Institute of Technology, Madras @ Chennai, - 600 036,   INDIA, July 1995.
   Dissertation Title : *Formal Models and Protocols For Distributed Orchestrated Presentation.*
   Dissertation Objective : The dissertation focuses on characterization of the functional and performance behavior of a distributed orchestrated multimedia presentation. The functional behavior is characterized by the synchronization characteristics and the performance behavior by the network traffic generated by the application. (**Advisor** : Prof S.V. Raghavan).
2. **Master of Science**, Department of Computer Science & Engineering, Indian Institute of Technology, Chennai, (formerly, Madras) - 600 036, INDIA, July 1990.
3. **Bachelor of Engineering**, Electronics & Communication, Madurai-Kamaraj University, August 1986.

PROFESSIONAL EXPERIENCE

1. Professor, Department of Computer Science, University of Texas at Dallas, Richardson, TX, 75080, USA. From September, 2010
2. Associate Professor, Department of Computer Science, University of Texas at Dallas, Richardson, TX 75083-0688, USA. From September 2004 – August 2010.
3. Assistant Professor, Department of Computer Science, University of Texas at Dallas, Richardson, TX 75083-0688, USA. January 2001 - August 2004.
4. Assistant Professor, School of Computing, National University of Singapore, Singapore 117543. Period: September 1997 - June 2001.
5. Research Associate, Department of Computer Science, University of Maryland, College Park, MD 20742, USA, September 1995 - September 1997.
6. Scientific Officer, Department of Computer Science & Engineering, Indian Institute of Technology, Madras - 600 036, INDIA, December 1989 - September 1996.
7. Project Officer, Project ERNET, Department of Computer Science & Engineering, Indian Institute of Technology, Madras - 600 036, INDIA, March 1987 - December 1989.
8. Quality Assurance Engineer, Indchem Electronics Ltd., Chennai, India. August 1986 – March 1987.

ADMINISTRATIVE EXPERIENCE

- Director, PhD Studies, Department of Computer Science, University of Texas at Dallas, 2010 – Present.
  Managing around 150 to 200 PhD students, with responsibilities including recruitment, funding (scholarship/ assistantships selection), curriculum, qualifying examination, and

mentoring.

o Organized several Doctoral Symposiums through ACM and IEEE for advising and mentoring PhD students for their research and career.

- Member of various Department, School of Engineering & Computer Science, and University level adminstrative committees.

PROFESSIONAL EXPERIENCE: Joint & Visiting Appointments

1. Consultant, Texas International Education Consortium, Austin (Review Curriculum - for Prince Mohammad Bin Fahd University, Saudi Arabia; Short-term course on Smart Cities) January – May 2019.
2. Consultant, Research Competitiveness Program (RCP) , American Association for the Advancement of Science (AAAS) – providing reviewer services for the King Abdulaziz City for Science and Technology (KACST) which is the national science agency of Saudi Arabia. Multiple occasions from 2010 onwards.
3. Consultant, Google Inc., January 2014-June2014.
4. Consultant, Vultinus LLC, 2014.
5. Consultant, The Ware Inc., 2011-2012.
6. Consultant, Infosys Research Labs, Bangaluru, India, 2012 – 2013.
7. Consultant, Interphase Inc., 2010 – 2011.
8. Affiliate Faculty, Department of Bioengineering, University of Texas at Dallas, 2011 – present.
9. Faculty, Computer Engineering Program, School of Engineering & Computer Science, University of Texas at Dallas, 2002 - present.
10. Faculty, Telecom Engineering Program, School of Engineering & Computer Science, University of Texas at Dallas, 2002 - present.
11. Faculty, Institute for Interactive Arts & Engineering, University of Texas at Dallas, 2002 -2010.
12. Consultant, NEC USA C&C Research Labs, San Jose, CA, July – December 2001.
13. Visiting Assistant Professor, Department of Computer Science, University of Texas at Dallas, USA, August - December 2000.
14. United Nations Fellow, Department of Electrical Engineering & Computer Science (EECS), University of California, Berkeley, USA, Fall 1989.

PROFESSIONAL RECOGNITION & HONORS

1. Invited Exhibitor, Arc of Science: From Research to Results, NSF – Capitol Hill Event (invited demonstrations to Congressmen and Senators), February 2017.
2. Best Associate Editor 2015, Springer's Multimedia Systems Journal.
3. ACM Distinguished Scientist, 2011.
4. Member of the Executive Council of the ACM Special Interest Group on Multimedia (SIGMM), 2008-till present.
5. Member, Steering Committee, IEEE International Conference on Health Informatics (ICHI), 2015 – till present.
6. Co-Chair of IEEE Technical Committe on Multimedia Computing (TCMC) Special Interest Group on Video Analytics (SIGVA), 2010-till present.
7. Member, Steering Committee, ACM Information Hiding & Multimedia and Security (IH & MMMSec), 2012 – till present.

8. Recipient, US National Science Foundation (NSF) CAREER Award, 2003. Funding: $400,000 from September 1, 2003 - August 31, 2008.
9. 2007 School of Engineering Outstanding Service Award for Computer Science Department, 2007: $25,000 grant.
10. Anston Clark Foundation Grant (Jointly awarded to B. Prabhakaran and R.N. Uma), "Scheduling delivery of multimedia information", Grant amount $48,000; 2002.

Press Releases
- "ARL extramural research provides novel technique to make advanced driver-assistance systems (ADAS) nearly tamperproof", Press Release from Army Research Laboratory, July 2018.
- "Mixed Reality for Managing Phantom Pain", ARO-in-Review, 2017 (US Army Research Office, Yearly Publication).
- On Veterans' Day of 2015, major news media all over the USA reported on the tele-rehabilitation platform developed using the multi-modal, 3D immersive platform developed at the University of Texas at Dallas. First reported by the newspaper from Austin, Texas, the following front-page article discussed the salient features of the system and its benefits for veterans.
  https://www.mystatesman.com/news/state--regional-govt--politics/texas-veterans-first-test-new-cyber-rehab-technology/uFWhnw4mfmhfc4BZJLZdzN/
  This AP news was later picked up by major newspapers all over the USA. Few radio shows also carried interviews with PIs B. Prabhakaran and Thiru Annaswamy.
  NSF widely publicized the interview with the Dallas Veterans Affairs Hospital physician using our tele-rehabilitation system.
  https://science360.gov/obj/video/50b8543e-2a19-4954-a026-f1606cc7b042/remote-immersive-telerehabilitation
- Dallas Morning News, February 13, 2006, carried an article on Prabhakaran's Army Research Office grant on secure usage of 3D data.

Research Activities

I. Product License
1. "Opti-Speech", Technology Licensed to Vulintus Inc., by the University of Texas, Dallas.
   Inventors: B. Prabhakaran, Thomas Campbell, Eric Farrar, William Katz, Robert Rennaker, Jennell Vick, and Jun Wang
   Opti-Speech is an interactive system that integrates tongue, lip, and jaw motion capture from 3D Electromagnetic Articulography (EMA) systems to animate a realistic 3D avatar. Supported by Small-Business Innovation Research (SBIR) grant 2R44DC013467 from the National Institute on Deafness and Other Communication Disorders.

II. Research Publications
A. Refereed Journals
1. "Designing and Evaluating A Mesh Simplification Algorithm for Virtual Reality", K. Bahirat, C. Lai, Ryan P. McMahan, and B. Prabhakaran, accepted for publication in the ACM Transactions on Multimedia Computing Communications and Applications (TOMM), Volume 14, Issue 3s, Article 63, June 2018.
2. "Real-time, Curvature-Sensitive Surface Simplification Using Depth Images", K. Bahirat,

S. Raghuraman, and B. Prabhakaran, *IEEE Transactions on Multimedia, 20(6): 1489-1498 (2018)*.

3.   "Association Rule Mining in Multiple, Multidimensional Time Series Medical Data", G.N. Pradhan and B. Prabhakaran, Journal of Healthcare Informatics Research (Springer), Volume 1, Issue 1, June 2017, pp. 92-118.

4.   "Motion Capture with Ellipsoidal Skeleton using Multiple Depth Cameras", Liang Shuai, Chao Li, Xiaohu Guo, Balakrishnan Prabhakaran, Jinxiang Chai, IEEE Transactions on Visualization and Computer Graphics, Volume: 23, Issue: 2, Feb. 1 2017, pp. 1085-1098.

5.   "Predictive modeling of respiratory tumor motion for real-time prediction of baseline shifts", A. Balasubramanian, R. Shamsuddin, B. Prabhakaran, and A. Sawant, Physics in Medicine and Biology, IOP Science, Volume 62, Number 5, February 2017.

6.   "Discovering Multidimensional Motifs in Physiological Signals for Personalized Healthcare", A. Balasubramanian, J. Wang, and B. Prabhakaran, IEEE Journal of Selected Topics in Signal Processing, Volume 10, Number 5, August 2016, pp. 832-841.

7.   "Scene Based Fingerprinting Method for Traitor Tracing", S. Mehta, R. Nallusamy, and B. Prabhakaran, Multimedia Systems Journal (Springer Publishers), Volume 22, Issue 2, pp. 197–211, March 2016.

8.   "Stable Haptic Interaction Based on Adaptive Hierarchical Shape Matching", Yuan Tian, Yin Yang, Xiaohu Guo, Balakrishnan Prabhakaran, Computational Visual Media, Vol. 1, No. 3, pp. 253-265, 2015.

9.   "Loss Aware Sample Packetization Strategy for Improvement of Body Sensor Data Analysis", Ming Li, Yu Cao, and B. Prabhakaran, Journal of Communications (JCM), Vol. 10, No. 11, November 2015.

10. "Distributed Haptic Interactions with Physically Based 3D Deformable Models over Lossy Networks", Z. Tang, Y. Yang, X. Guo, and B. Prabhakaran, IEEE Transactions on Haptics, Vol. 6, No. 3, 2013, pp. 417-428.

11. "Point-Based Manifold Harmonics," Yang Liu, Balakrishnan Prabhakaran, Xiaohu Guo, in IEEE Transactions on Visualization and Computer Graphics, Vol. 18, No. 10, 2012, pp. 1693-1703.

12. "Analyzing and Visualizing Jump Performance Using Wireless Body Sensors", G.N. Pradhan and B. Prabhakaran, *ACM Transactions on Embedded Computing Systems*, Volume 11, Issue S2, Article No. 47, August 2012.

13. "Spectral Watermarking for Parameterized Surfaces," Yang Liu, Balakrishnan Prabhakaran, Xiaohu Guo, in IEEE Transactions on Information Forensics and Security, Vol. 7, No. 5, 2012, pp. 1459-1471.

14. "Video Human Motion Recogntion Using Knowledge-based Hybrid Method Based On Hidden Markov Model", M.H. Suk, A. Ramadass, Y. Chin, and B. Prabhakaran, *ACM Transactions on Intelligent Systems and Technology*, Volume 3 Issue 3, Article No. 42, May 2012.

15. "Database Inference Controller for 3D Motion Capture Database", R. Natarajan, B. Thuraisingham, B. Prabhakaran, and L. Khan, accepted for publication in the International Journal of Information Security and Privacy, IGI Global Publishers, 2011.

16. "Motion Fault Detection and Isolation in Body Sensor Networks, Duk-Jin Kim, B. Prabhakaran, *Pervasive and Mobile Computing*, (Elsevier Publishers), Volume 7, Issue 6, Pages 727-745, December 2011. (Earlier version appeared in Proceedings of 9th IEEE Pervasive Computing and Communication (PerCom) Conference, March 2011).

17. "Analyzing Motoric and Physiological Data in Describing Upper Extremity Movement in the Aged", G.N. Pradhan, N. Engineer, M. Nadin, and B. Prabhakaran, accepted for publication in *Springer International Journal on Universal Access in the Information Society (UAIS),* Volume 10, Number 2, Pages 139-150, June 2011.

18. "Knowledge Discovery from 3D Human Motion Streams through Semantic Dimensional Reduction", Yohan Jin and B. Prabhakaran, *The ACM Transactions on Multimedia Computing, Communications and Applications (ACM TOMCCAP)*, Volume 7 Issue 2, Article 9, February 2011.

19. "Receiver-Based Loss Tolerance Method for 3D Progressive Streaming", Ziying Tang, Xiaohu Guo, Balakrishnan Prabhakaran, *International Journal of Multimedia Tools and Applications*, Vol. 51, No. 2, pp. 779-799, January 2011 (Published Online October 2010).

20. "Dirichlet Harmonic Shape Compression with Feature Preservation for Parameterized Surfaces", Yang Liu, Balakrishnan Prabhakaran, Xiaohu Guo, *Computer Graphics Forum* (PG'10 special issue), Vol. 29, No. 7, pp. 2039-2048, September 2010.

21. "On Supporting Reliable QoS in Multi-hop Multi-rate Mobile Ad Hoc Networks", Ming Li, B. Prabhakaran, *ACM/Springer/URSI Wireless Networks (WINET)*, Vol. 16, No. 3, pp. 813-827, April 2010.

22. "Dynamic Priority Re-allocation Scheme for Quality of Service in IEEE 802.11e Wireless Networks", Ming Li, Hua Zhu, B. Prabhakaran, *ACM/Springer/URSI Wireless Networks* (WINET), Vol. 16, No. 3, pp. 759 - 774, April 2010.

23. "A Body Sensor Network with Electromyogram and Inertial Sensors: Multi-modal Interpretation of Muscular Activities," H. Ghasemzadeh, R. Jafari, and B. Prabhakaran, IEEE Transactions on Information Technology in Biomedicine, Vol. 14, No. 2, pp. 198-207, March 2010.

24. "Knowledge Based Image Annotation Refinement", Yohan Jin, Latifur Khan, B.Prabhakaran, accepted for publication, *Journal of Signal Processing Systems*, Springer Publishers, (On-line First, September 2009) Volume 58, Number 3, Pages 387-406, March 2010.

25. "Blind Robust Watermarking of 3-D Motion Data", P. Agarwal, and B. Prabhakaran, *The ACM Transactions on Multimedia Computing, Communications and Applications (ACM TOMCCAP),* Vol. 6(1), Article 2, 2:1-2:32, Feb. 2010.

26. "Architecture and Protocol Design for A Pervasive Robot Swarm Communication Networks" Ming Li, John Harris, Min Chen, Shiwen Mao, Yang Xiao, Walter Read, B. Prabhakaran, *Wireless Communications and Mobile Computing*, John Wiley & Sons Publishers, October 2009 (Online First).

27. "Indexing 3D Human Motion Repositories for Content-based Retrieval", G. N. Pradhan and B. Prabhakaran, *IEEE Transactions on Information Technology in BioMedicine*, Vol.. 13, No. 5, pp. 802-809, September 2009.

28. "On Supporting High Quality 3D Geometry Multicasting over IEEE 802.11 Wireless LANs", Hui Li, Ming Li, B. Prabhakaran, *IEEE Transactions on Computers*, Vol. 58, No. 4, pp. 558-571, April 2009.

29. "Blind Robust Watermarking of Point Sampled Geometry", P. Agarwal, and B. Prabhakaran, *IEEE Transactions on Information Forensics and Security*, Vol 4, No. 1. Pp. 36-48, March 2009.

30. "Reliable Transmission of Audio Streams in Lossy Channels Using Application Level

Data Hiding", Parag Agarwal and B. Prabhakaran, *Journal of Multimedia*, Academy Publisher, Vol. 3, Issue 5, pp. 1-8, Dec. 2008.

31. "Hand Gesture-based Computing for Hearing and Speech Impaired", Gaurav N. Pradhan, Chuanjun Li, B. Prabhakaran, *IEEE MultiMedia Magazine,* Vol. 15, No. 2, pp. 20-27, April-June 2008.

32. "Partial Fuzzy Query Resolution for Animation Authoring", Phani S Kotharu and B. Prabhakaran, *ACM Transactions on Multimedia Computing, Communications, and Applications (TOMCCAP)*, Vol.4, Issue 2, Article 4, January 2008.

33. "Minimizing Collision Pairs Searched in Interactive Animation Authoring", Parag Agarwal, Srinivas Rajagopalan and B. Prabhakaran, *The Visual Computer*, Volume 24, Number 5, pp. 347-359, May, 2008.

34. "Motion Stream Segmentation and Recognition by Classification", Chuanjun Li, P. R. Kulkarni and B. Prabhakaran, *International Journal of Multimedia Tools and Applications (MTAP)*, Springer, Vol.35(1), pp. 55-70, October 2007.

35. "Segmentation and Recognition of Motion Streams by Similarity Search", Chuanjun Li, S. Q. Zheng and B. Prabhakaran, *ACM Transactions on Multimedia Computing, Communications and Applications (ACM TOMCCAP)*, Vol. 3(3), Article 16, August 2007.

36. "Animation Toolkit Based on Database Approach for Reusing Motions and Models", Akanksha, Z. Huang, B. Prabhakaran, and C.R. Ruiz, *Multimedia Tools and Applications*, Springer, Volume 32, Number 3, pp. 293-327, March, 2007.

37. "Middleware for Streaming 3D Progressive Meshes over Lossy Networks", Hui Li, Ming Li, B. Prabhakaran, *ACM Transactions on Multimedia Computing, Communications, and Applications* (TOMCCAP), Vol. 2, Issue 4, pp. 282 – 317, November 2006.

38. "Indexing of Motion Capture Data for Efficient and Fast Similarity Search", Chuanjun Li and B. Prabhakaran, *Journal of Computers (JCP)*, Academy Publisher, Vol. 1(3), pp. 35-42, June 2006.

39. "End-to-end QoS Framework for Heterogeneous Wired-cum-Wireless Networks", Ming Li, Hua Zhu, Imrich Chlamtac, B. Prabhakaran, *ACM/Springer Wireless Networks (WINET)*, Volume 12, Number 4, pp. 439-450, August 2006.

40. "Real-time Classification of Variable Length Multi-attribute Motion Data", Chuanjun Li, Latifur Khan and B. Prabhakaran, *Knowledge and Information Systems: An International Journal (KAIS)*, Springer, Vol.10, No. 2, pp. 163-183, August 2006.

41. "MAC Layer Admission Control and Priority Re-allocation for Handling QoS Guarantees in Non-cooperative Wireless LANs", Ming Li, and B. Prabhakaran, *ACM/Springer Mobile Networks and Applications (MONET)*, Special issue on Non-cooperative Computing in Wireless Networks, Vol. 10, No. 6, pp. 947-959, December 2005.

42. "Flexible Disk Scheduling Strategies for Multimedia Presentation Servers", S. Emilda, L. Jacob, O. Daescu, and B. Prabhakaran, *Multimedia Tools and Applications, Kluwer Academic Publishers*, Volume 26, Number 1, pp. 81-99, February 2005.

43. " Survey of Quality of Service in IEEE 802.11 Networks", Hua Zhu, Ming Li, Imrich Chlamtac, and B. Prabhakaran, *IEEE Wireless Communication*, Volume 11, Issue 4, August 2004, pp. 6 - 14.

44. "Application-layer Protocol for Collaborative Multimedia Presentations", E. Hwang and B. Prabhakaran, *Multimedia Tools and Applications journal*, Kluwer Academic Publishers, Volume 21, Issue 2, pp. 103-123, November 2003.

45. "Unified Read Requests", E. Hwang and B. Prabhakaran, *Multimedia Tools and Applications journal*, Kluwer Academic Publishers, Volume 20, Number 3, pp. 203-224, August 2003.
46. "Experiences With an Object-level Scalable Web Framework", B. Prabhakaran, Yuguang Tu, and Yin Wu, *Journal of Network and Computer Applications*, Academic Press, Vol. 26, Issue 2, pp. 163-196, April 2003.
47. "Visualizing Animation Databases", Akanksha, Huang Z., Prabhakaran B. and Ruiz, Jr. C. R., *International Journal of Software Engineering and Knowledge Engineering (IJSEKE)*, Vol. 13, No. 1, pp. 1-25, February 2003.
48. "Presentation Planning For Distributed Video Systems", E. Hwang, B. Prabhakaran, and V.S. Subrahmanian, *IEEE Transactions on Knowledge and Data Engineering*, Vol. 14, No. 5, pp. 1059-1078, September/October 2002.
49. "Multimedia Information Delivery Over Wireless Channels", B. Prabhakaran, *Multimedia Tools and Applications journal*, Kluwer Academic Publishers, Vol. 15, No. 2, pp. 115-124, November 2001.
50. "Adaptive Multimedia Presentation Strategies", B. Prabhakaran, *Multimedia Tools and Applications journal*, Kluwer Academic Publishers, Vol. 12, No. 2-3, pp. 281-298, November 2000.
51. "Retrieval Scheduling Algorithm For Collaborative Multimedia Presentations", P. Bai, B. Prabhakaran, and A. Srinivasan, *ACM/Springer-Verlag Multimedia Systems Journal*, Vol. 8, No. 2, pp. 146-155, March 2000.
52. "Collaborative Multimedia Presentations in Mobile Environments", B. Prabhakaran, *Multimedia Tools and Applications journal*, Kluwer Academic Publishers, Vol. 9, No. 1, pp. 95-109, July 1999.
53. "Collaborative Multimedia Documents: Authoring and Presentation", K.S. Candan, B. Prabhakaran, and V.S. Subrahmanian, *International Journal* of *Intelligent Information Systems*, Vol. 13, No. 12, pp. 1059-1111, 1998.
54. "Retrieval Schedules Based on Resource Availability and Flexible Presentation Specifications", K.S. Candan, B. Prabhakaran and V.S. Subrahmanian, *Springer Multimedia Systems Journal*, Vol. 6, No. 4, pp. 232-250, July 1998.
55. "Synchronization Representation and Traffic Source Modeling in Orchestrated Presentation", S.V. Raghavan, B. Prabhakaran and Satish K. Tripathi, *IEEE Journal on Selected Areas in Communication*, special issue on Multimedia Synchronization, Vol. 14, No. 1, pp. 104-113, January 1996.
56. "Handling QoS Negotiations in Orchestrated Multimedia Presentations", S.V.Raghavan, B. Prabhakaran, and Satish K. Tripathi, *Journal of High Speed Networks*, Vol. 5, No. 3, pp. 277-292, 1996.
57. "Synchronization Models For Multimedia Presentation With User Participation", B. Prabhakaran and S.V. Raghavan, *ACM/Springer-Verlag* Multimedia Systems, Vol. 2, No. 2, pp. 53-62, August 1994.

Guest Editorials in Journals:
58. Editorial IEEE Transactions on Multimedia Special Section on Video Analytics: Challenges, Algorithms, and Applications, B. Prabhakaran, Yu-Gang Jiang, Hari Kalva, Shih-Fu Chang IEEE Trans. Multimedia 20(5): 1037 (2018)
59. Guest Editorial. Pervasive and Mobile Computing, Albert Banchs, Balakrishnan

Prabhakaran, 11: 1-2 (2014)

60. "Multimedia data semantics: guest editors introduction", Raphaël Troncy, Balakrishnan Prabhakaran, Yu Cao Multimedia Tools Appl. 59(2): 579-583 (2012)

61. "*Multimedia Semantics*", B. Prabhakaran, *Journal of Signal Processing Systems* (Springer), Volume 58, Number 3, Pages 371-372, March 2010.

62. "*Techniques for multimedia Presentation*", B. Prabhakaran, *Multimedia Tools and Applications (MTAP)*, Volume 12, Numbers 2-3 / November, 2000, pp. 107-108.

63. "*Multimedia Authoring & Presentation Techniques*", B. Prabhakara, *ACM/Springer Multimedia Systems journal*, Volume 8, Number 3 / October, 2000, pp. 157.

64. "*Mobile Computing Environments for Multimedia Systems*", B. Prabhakaran and M. Kavehrad, *Multimedia Tools and Applications (MTAP)*, Volume 9, Number 1 / July, 1999, pp. 1-2.

B.1 Books

1. Author of book *Multimedia Database Management Systems*, Kluwer Academic Publishers, Boston, 1996.
2. Edited Book: *Mobile Computing Environments for Multimedia Systems*, Kluwer Academic Publishers. Editors: B. Prabhakaran and M. Kavehrad.

B.1 Book Chapters

3. Author of a chapter on *Multimedia Synchronization* in *Design and Applications of Multimedia Systems*, Kluwer Academic Publishers. Editor : Prof Borko Furht.

4. Author of a chapter on *Multimedia Synchronization* in *Handbook of Multimedia Systems*, CRC Press, Florida.

5. Author of a chapter on *Temporal Models and Their Applications in Multimedia Information Retrieval* in the edited book *Design and Management of Multimedia Information Systems: Opportunities and Challenges*, Idea Group Publishing, Hershey, USA, 2001.

6. Author of a chapter on *Animation Databases*, in the edited book *Handbook of Video Databases*, pp. 417-440, CRC Press, Florida in 2003.

7. "Middleware for Streaming 3D Progressive Meshes Over Lossy Networks", H. Li and B. Prabhakaran, Chapter 33, *Encyclopedia of Multimedia*, Springer, pp. 409-416, 2005.

8. "Feature Selection for Classification of Variable length Multi-attribute Motions", Chuanjun Li, Latifur Khan and B. Prabhakaran, chapter 7, *Multimedia Data Mining and Knowledge Discovery*, V. A. Petrushin and L. Khan, eds., Springer, pp. 129-152, 2007, ISBN: 978-1-84628-436-6.

9. "Multimedia Databases", B. Thuraisingham, L. Khan, and B. Prabhakaran, in Encyclopedia of Multimedia, CRC Press.

10. "Managing and Mining Multimedia Data, Animations and Annotation", B. Thuraisingham, L. Khan, B. Prabhakaran, and L. Wang, Chapter in Edited Book, Wiley Encyclopedia of Computer Science and Engineering 2008, John Wiley & Sons.

11. "3D Human Motion Control Through Refined Video Gesture Annotation" , Yohan Jin, Myunghoon Suk, and B.Prabhakaran, Chapter in Edited Book, Handbook of Digital Media in Entertainment and Arts, Springer.

Short Articles:

12. "Compressed progressive meshes", H. Li and B. Prabhakaran, Chapter 33, *Encyclopedia of Multimedia*, Springer, pp. 84-85, 2005.
13. "Progressive Forest split", H. Li and B. Prabhakaran, Chapter 33, *Encyclopedia of Multimedia*, Springer, pp. 714-715, 2005.
14. "Valence driven conquest", H. Li and B. Prabhakaran, Chapter 33, *Encyclopedia of Multimedia*, Springer, pp. 857-858, 2005.

C.1. Edited Conference Proceedings

1. Prabhakaran Balakrishnan, Jaideep Srivatsava, Wai-Tat Fu, Sanda Harabagiu, and Fei Wang, International Conference on Health Informatics (ICHI 2015), October 2015, IEEE Press.
2. S. Miksch, R. Bellazi, and B. Prabhakaran, International Conference on Health Informatics (ICHI 2014), October 2014, IEEE Press.
3. Ramesh Jain, Balakrishnan Prabhakaran, Marcel Worring, John R. Smith, Tat-Seng Chua (Eds.): International Conference on Multimedia Retrieval, ICMR'13, Dallas, TX, USA, April 16-19, 2013. ACM 2013, ISBN 978-1-4503-2033-7
4. Albert Banchs, Balakrishnan Prabhakaran: 2012 IEEE International Symposium on a World of Wireless, Mobile, and Multimedia Networks WoWMoM. WOWMOM 2012.
5. K. Selçuk Candan, Sethuraman Panchanathan, Balakrishnan Prabhakaran, Hari Sundaram, Wu-chi Feng, Nicu Sebe (Eds.): Proceedings of the 19th International Conference on Multimedia 2011, Scottsdale, AZ, USA, November 28 - December 1, 2011. ACM 2011, ISBN 978-1-4503-0616-4
6. Deepa Kundur, Balakrishnan Prabhakaran, Jana Dittmann, Jessica J. Fridrich (Eds.): Proceedings of the 9th workshop on Multimedia & Security, MM&Sec 2007, Dallas, Texas, USA, September 20-21, 2007. ACM 2007, ISBN 978-1-59593-857-2

C.2 Refereed Conference Publications

1. ""A Position-based Evaluation to Identify the Preferred Navigation Mechanism for Collaborative, Virtual Reality Tours" Multimedia Alternate Realities (AltMM 2018), at 26th ACM Multimedia2018, Seoul, Korea, October 2018.
2. "ALERT: Adding a Secure Layer in Decision Support for Advanced Driver Assistance System (ADAS)", K. Bahirat, U. Shah, A. Cardenas, and B. Prabhakaran, Proceedings of 26th ACM Multimedia 2018, Seoul, Korea, October 2018.
3. "Combining Skeletal Poses for 3D Human Model Generation using Multiple Kinects", K. Desai, S. Raghuraman, and B. Prabhakaran, to appear in the *Proceedings of the 8th ACM Multimedia Systems (MMSys'18)*, Amsterdam, June 2018.
4. "Skeleton-based Continuous Extrinsic Calibration of Multiple RGB-D Kinect Cameras", K. Desai, S. Raghuraman, and B. Prabhakaran, to appear in the *Proceedings of the 8th ACM Multimedia Systems (MMSys'18)*, Amsterdam, June 2018.
5. "Virtual Patient Model: An Approach for Generating Synthetic Healthcare Time Series Data", Rittika Shamsuddin, Barbara Maweu, B. Prabhakaran, and Ming Li, *Proceedings of IEEE ICHI (International Conference on Health Informatics) 2018,* New York, June 4-7, 2018.
6. "Exploring functional clinical attributes for macular dystrophy detection", Rittika Shamsuddin, Yizhong Wang, Balakrishnan Prabhakaran, *Proceedings of ACM IWISC*

(International Workshop on Interactive and Spatial Computing) 2018, Dallas, Texas, April 12-13, 2018.

7. "LearnDNA: an interactive VR application for learning DNA structure", Lakshmi Sharma, Rong Jin, Balakrishnan Prabhakaran, Murry Gans, *Proceedings of ACM IWISC (International Workshop on Interactive and Spatial Computing) 2018*, Dallas, Texas, April 12-13, 2018.

8. "Mr.MAPP: Mixed Reality for MAnaging Phantom Pain", K. Bahirat, T. Annaswamy, and B. Prabhakaran, *Proceedings of the 25th ACM Multimedia (MM 2017)*, Mountain View, CA, October 2017.

9. "H-TIME: Haptic-enabled Tele-Immersive Musculoskeletal Examination", Y. Tian, S. Raghuraman, T. Annaswamy, A. Borresen, K. Nahrstedt, and B. Prabhakaran, *Proceedings of the 25th ACM Multimedia (MM 2017)*, Mountain View, CA, October 2017. **Best Student Paper Award.**

10. "Data Reliability-Aware and Cloud-Assisted Software Infrastructure for Body Area Networks", J. Reeves, C. Moreno, M. Li, C. Hu, and B. Prabhakaran, *Proceedings of the 12th Body Area MNetworks*, Dalian, China, September 2017.

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122. "*On Flow Reservation and Admission Control for Distributed Scheduling Strategies in IEEE802.11 Wireless LAN*", Ming Li, B. Prabhakaran, and S. Satyamurthy, Proceedings of the Sixth ACM International Workshop on Modeling Analysis and Simulation of Wireless and Mobile Systems (MSWiM 2003), held along with ACM MobiComm'03, pp. 108-115, San Diego, CA, September 2003.

123. "*Interactive Visual Method for Motion and Model Reuse*", Akanksha, Z. Huang, B.

Prabhakaran, and Ruiz, Jr. C. R., Proceedings of Graphite 2003, David Arnold and Geoff Wyvill (eds.), A Publication of ACM SIGGRAPH, pp. 29-36, color plates, 293. Melbourne, Australia, 2003.

124. "*A Framework For Reuse From Animation Multi-Databases*", N. Chokkareddy, Z. Huang, B. Prabhakaran, and M. Vattikuti, Proceedings of Multimedia Modeling Conference (MMM 2003), Chin-Hui Lee and Timothy K. Shih (eds), Tamkang University, Taiwan, January, 2003, pp. 343-364.

125. "*Programmable Web Environment for Multimedia Applications*", J. Jakilinki and B. Prabhakaran, Proceedings of IEEE Workshop on Multimedia Signal Processing (MMSP'02), US Virgin Islands, December 2002.

126. "*Flexible Strategies for Disk Scheduling in Multimedia Presentation* Servers", S. Emilda, L. Jacob, O. Daescu, and B. Prabhakaran, Proceedings of IEEE Workshop on Multimedia Signal Processing (MMSP'02), US Virgin Islands, December 2002.

127. "*MAC Protocol Enhancements and A Distributed Scheduler for QoS* Guarantees over the IEEE 802.11 Wireless LANs", L. Jacob, Q. Qiu, R. R. Pillai, and B. Prabhakaran, Proceedings of the 56th IEEE Vehicular Technology Conference (VTC'2002), Vancouver, Canada, pp 2410 -2413, September 2002.

128. "*Mobile Tracking Using Forward Link in Cellular Networks*", S. Shenbagaraman, S. Venkatesan, and B. Prabhakaran, Proceedings of Emerging Telecommunications Technologies Symposium, Richardson, September 2002. Also available as Technical Report UTD-CS-09-02, Department of Computer Science, University of Texas at Dallas, Richardson, TX 75083-0688, June 2002.

129. "*Flexible Disk Scheduling for Multemedia Presentation Servers*", S. Emilda, L. Jacob, O. Daescu, and B. Prabhakaran, 10th IEEE International Conference on Networks 2002 (ICON 2002), pp. 151 -155, Singapore, 2002.

130. "*MAC Protocol Enhancements for QoS Guarantee and Fairness over the IEEE 802.11 Wireless LANs*", Q.Qiang, L. Jacob, R. Pillai, and B. Prabhakaran, Proceedings of 11th IEEE International Conference on Computer Communications and Networks (IC3N02), pp. 628-633, Miami, Florida, October 2002.

131. "*A Scalable Web Hosting Framework*", B. Prabhakaran, Yuguang Tu, and Yin Wu, ISCA 14th International Conference on Parallel and Distributed Computing Systems Richardson, Texas, USA, August 8-10, 2001

132. "*Reusing Motions and Models in Animation*", Akanksha, Z Huang, B Prabhakaran, C R Ruiz, Jr., Proceedings of Eurographics MM 2001, Springer-Verlag/Wien, ISBN 3-211-83769-8, pp. 21-32. Also appears in J A Jorge, N M Correia, H Jones and M B Kamegai (eds.) Multimedia 2001, Springer-Verlag/Wien, ISBN 3-211-83769-8. pp. 21-32, 2002.

133. "*An On-line Repository for Embedded Software*", I-Ling Yen, Latifur Khan, B. Prabhakaran, Farokh B. Bastani, and John Linn, the Thirteenth Annual International Conference on Tools with Artificial Intelligence (ICTAI-2001), Richardson, TX, 2001.

134. "*Reusing Animations in Databases for Multimedia Presentations*", B. Prabhakaran, Binjia Jiao, Conrado R. Ruiz, Jr. and Zhiyong Huang, Asian Computing Conference 2000, Malaysia.

135. "*A Forward Error Recovery Technique For Real-time MPEG-2 Video Transport and its Performance over Wireless IEEE 802.11 LAN*", R. Pillai, B. Prabhakaran, and Q. Qiang, Proceedings of IEEE ICCCN 2000, Las Vegas, October 2000.

136. "*Protocols for Collaborative Multimedia Presentations*", E. Hwang and B. Prabhakaran, IEEE International Conference on Multimedia and Expo (ICME 2000), New York, July 2000.

137. "*Scalable Video Delivery on the Web*", B. Prabhakaran, Yuguang Tu, and Yin Wu, Network and Operating System Support for Digital Audio and Video (NOSSDAV 2000), Chapel Hill, USA, June 2000.

138. "*Merging Retrieval Requests for Multimedia Storage Server*", B. Prabhakaran and E. Hwang, First International Workshop on Intelligent Multimedia Computing and Networking (IMMCN' 2000), New Jersey, USA, March 2000.

139. "*Scheduling Multimedia Information Delivery Over Unicast Wireless Channels*", B. Prabhakaran, Proceedings of 3rd IEEE Symposium on Application-Specific Systems and Software Engineering and Technology (ASSET 2000), Richardson, Texas, March 2000.

140. "*Application-Layer Broker For Scalable Internet Services With Resource Reservation*", P. Bai, B. Prabhakaran, and A. Srinivasan, Proceedings of ACM Multimedia'99, Orlando, 1999.

141. "*A Forward Error Recovery Technique For MPEG-II Video Transport*", R. Pillai, B. Prabhakaran, and Q. Qiang, Proceedings of ACM Multimedia'99, Orlando, 1999.

142. "*Resource Negotiation for Collaborative Multimedia Presentations*", B. Prabhakaran, IEEE Conference on Multimedia Computing Systems (ICMCS'99), Florence, Italy, June 1999.

143. "*Distributed Video Presentations*", E. Hwang, B. Prabhakaran, and V.S. Subrahmanian, Proceedings of International Conference on Data Engineering (ICDE'98), Orlando, February 1998.

144. "*Scheduling Responses From Video Databases*", E. Hwang, B. Prabhakaran, and V.S. Subrahmanian, Proceedings of Third International Workshop on Multimedia Information Systems, Lake Como, Italy, September 1997.

145. "*CHIMP: A Framework for Supporting Multimedia Document Authoring and Presentation*", K.S. Candan, B. Prabhakaran and V.S. Subrahmanian, Proceedings of ACM Multimedia '96 Conference, Boston, November 1996.

146. "*CHIMP: A Framework For Distributed Multimedia Documents*", K.S. Candan, B. Prabhakaran, and V.S. Subrahmanain, Proceedings of Second International Workshop on Multimedia Information Systems, West Point, New York, USA, September 1996.

147. "Quality of Service Considerations For Distributed, Orchestrated Multimedia Presentation", S.V. Raghavan, B. Prabhakaran and Satish K. Tripathi, Proceedings of High Performance Networking 94 (HPN'94), Paris, France, July 1994, pp. 217-238.

148. "*Synchronization Models For Multimedia Presentation With User Participation*", B. Prabhakaran and S.V. Raghavan, Proceedings of ACM Multimedia'93, Anaheim, California, August 1993, pp. 156-164.

149. "*Formal Specification of Fault Management Systems Using O-ESTELLE*", B. Prabhakaran and S.V. Raghavan, Proceedings of International Conference on Communication Systems (ICCS), Singapore, November 1992.

150. "*Object Oriented Extensions to ESTELLE*", B. Prabhakaran and S.V. Raghavan, Proceedings of the Tenth International Conference in Computer Communication, ICCC-90, pp. 750-757, November 1990.

151. "*Design and Implementation of Distributed Information Management* System in *OSI Environment*", M.K. Suresh, B. Prabhakaran and S.V.Raghavan, Proceedings of

International Conference on Communication Systems (ICCS), Singapore, November 1990.

152. *"EEPP: E-Estelle Pre-Processor"*, B. Prabhakaran and S.V.Raghavan, Proceedings of International Conference on Communication Systems (ICCS), Singapore, November 1990.

153. *"Implementation of Distributed Information Management System over TCP/IP"*, S.V. Raghavan, M.K. Suresh and B. Prabhakaran, Proceedings of Intl. Conference on Management of Data (COMAD'89) held at Hyderabad, November 1989.

III. Invited Talks

1. Invited Speaker, US Air Force Science and Technology 2030 (Vision workshop organized as part of Secretary of the U.S. Air Force initiative), Salt Lake City, July 11, 2018.
2. Invited Participant, The Future VR/AR Network – Towards Virtual Human/Object Teleportation - NSF Vision Workshop on Networked Virtual and Augmented Reality Communications Washington, DC, April 23-24, 2018.
3. Keynote Speaker, "Quantifying the Quality of Immersive Experiences", 2nd ACM International Workshop on Multimedia Alternate Realities (AltMM 2017), Mountain View, CA, October 2017.
4. Invited Exhibitor (invited by the US National Science Foundation (NSF)), Smithsonian's ComicCon/FutureCon at AwesomeCon, Washington DC, June 2017.
5. Invited Participant, NSF Workshop on Multimedia Research Challenges for the Next Ten Years, Arlington, VA, March 2017.
6. Invited Exhibitor, Arc of Science: From Research to Results, NSF – Capitol Hill Event (invited demonstrations to Congressmen and Senators), February 2017.
7. Invited Speaker, "Tele-Rehabilitation: Status of Current Research, Clinical Practice, Medicolegal Issues, and Implications for Future", 2017 Annual Meeting of Association of American Physiatrists, Las Vegas, NV, February 2017.
8. Keynote Speaker, "All Living Things Move – Role of Kinematics in Healthcare and Performance", 3rd Pattern Recognition for Healthcare Analytics workshop at ICPR2016, Cancun, Mexico, December 2016.
9. Panelist, 3rd Pattern Recognition for Healthcare Analytics workshop at ICPR2016, Cancun, Mexico, December 2016.
10. Tutorial Speaker, "Mulsemedia"-based Collaborative Mixed/Virtual Reality Environments", IEEE International Conference on Multimedia and Expo (ICME), Seattle, July 2016.
11. Plenary Speaker, "MulSeMedia–The case of Vanishing Role Differences and Delays between Content Producers and Consumers", 8th Mexican Conference on Pattern Recognition (MCPR), Guanajuato, Mexico, June 22-25, 2016.
12. Tutorial Speaker, "MulSeMedia-based Collaborative Mixed/Virtual Reality Environments", 8th Mexican Conference on Pattern Recognition (MCPR), Guanajuato, Mexico, June 22-25, 2016.
13. Invited Speaker, "Multimedia 2035", IEEE International Conference on Multimedia and Expo (ICME 2015), Torino, Italy, June 29-July 3, 2015.
14. Invited Participant, Retreat on Future of Multimedia, ACM Special Interest Group on Multimedia (SIGMM), Orlando, Florida, November 2014.
15. Invited Speaker, International Conference on Wireless Sensor Networks & Information Security, SASTRA University, December 2013.
16. Colloquium Speaker, "Tele-Rehabilitation", University of Texas at Arlington, November 2013.

17. Invited Speaker, ACM SIGMM Business Meeting, Barcelona, Spain, October 2013.
18. Invited Speaker, International Conference on Data Mining and Soft Computing Techniques, SASTRA University, India, October 2013.
19. Invited Speaker, Florida AM Radio show on Health, Wealth and Wisdom, March 6 2013 (3.30pm)
20. Invited Speaker, ACM SIGMM Business Meeting, Nara Japan, October 2012.
21. Tutorial Speaker, "3D Video Segmentation, Recognition, and Retrieval", ACM International Conference on Multimedia Retrieval (ICMR 2012), Hong Kong, June 2012.
22. Invited Speaker, "Supporting Immersive Tele-Rehabilitation", Computer Science Department, University of California, Berkeley, June 2012.
23. Invited Speaker, International Workshop on Hot Topics in Multimedia Research, New York University in Abu Dhabi (NYUAD), United Arab Emirates on May 2-3, 2012.
24. Invited Participant, ACM SIG (Special Interest Groups) Governing Board (SGB), Chicago, March 2012.
25. Invited Speaker, "Multimedia Security", Invited Workshop on Future Wireless and Multimedia Systems, InfoSys Campus, Bangaluru, India, December 2011.
26. Panelist, Future Internet Research, Invited Workshop on Future Wireless and Multimedia Systems, InfoSys Campus, Bangaluru, India, December 2011.
27. Invited Speaker and Participant, ACM SIGMM (Special Interest Group on Multimedia) Business Meeting, November, 2011.
28. Invited Speaker, "MOVERS: Mobile Virtual Environment Rehabilitation System", Physical Medicine & Rehabilitation (PM&R) Annual Scientific day, University of Texas Southwestern Medical Center, Dallas, Texas, May 2011.
29. Invited Speaker, "Working with Multiple, Multidimensional Body Sensor Data Streams", Computer Science Department, University of Illinois, Urbana-Champaign, 2011.
30. Invited Speaker, "Analyzing Body Sensor Streams", Computer Science Department, University of Ottawa, Canada, 2010.
31. Invited Speaker, "Working with Multiple, Multidimensional Body Sensor Data Streams", IBM TJ Watson Research Center, New York, 2010.
32. Invited Speaker, "Multimodal Sensing of Human Interaction", IEEE Dallas Computer Society, April 2010.
33. Invited Speaker, Computer Science Department, Southern Methodist University (SMU), Dallas.
34. Tutorial Speaker, "Signal Processing in Body Sensor Networks", IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), March 15, 2010, Dallas, Texas.
35. Invited Speaker and Participant, ACM SIGMM (Special Interest Group on Multimedia) Business Meeting, October, 2010.
36. Keynote Speaker, "Enriching User Experience with Intuitive Interactions and Immersive Environments", Workshop on Ambient Media Computing, held along with ACM Multimedia 2009, Beijing, October 23, 2009.
37. Invited Speaker and Participant, ACM SIGMM (Special Interest Group on Multimedia) Business Meeting, October 21, 2009.
38. Tutorial Speaker, "Multimedia Aspects in Pervasive Health Care", ACM Multimedia, October 20, 2009.
39. Keynote Speaker, "Sensing Human Interaction", IASTED Internet and Multimedia Systems and Applications, August 17-19, 2009, Honolulu, Hawaii.

40. Tutorial Speaker, "Multimedia Aspects in Health Care", IEEE Conference on Multimedia and Expo (ICME), New York, June - July 2009.
41. Invited Speaker, "Classifying Human Performance", Defense Academy for Credibility Assessment, Fort Jackson, SC, February 26, 2009.
42. Tutorial Speaker, "Storage, Retrieval, and Communication of Body Sensor Network Data", ACM Multimedia, October 2008.
43. Invited Speaker ("SIGMM Online") and Participant, ACM SIGMM Retreat October 26-27, 2008.
44. Invited Speaker ("SIGMM online") ACM SIGMM Business Meeting, October 2008.
45. Invited Speaker ("Body Sensor Networks") in Anna University (MEPCO, Sivakasi Campus), SASTRA University, Madurai-Kamaraj University, July 2008.
46. Invited Speaker and Participant, Hot Topics in Multimedia Research, ACM Multimedia Technical Program Committee Workshop, June 21, Darmstadt, Germany.
47. Invited Speaker ("Context Assistance in Media Interpretations"), and Participant, Dagstuhl Seminar on *Contextual and Social Aspects of Multimedia*, Dagstuhl Castle, Germany, June 2008.
48. Invited Speaker, "Portable Biomechanical Monitoring Systems: Science, Technology and Potential Rehabilitation Applications", Physical Medicine & Rehabilitation Grand Rounds, University of Texas Southwestern Medical Center, June 6, 2008.
49. Invited Speaker, "Analyzing Human Performance Data Streams", UTD-Keimyung University, South Korea Conference, Dallas, TX, June 12 2008.
50. Invited Speaker, "Working with Multiple, Multidimensional Human Performance Data Streams", First bigD* Regional Symposium on Data and Information Management, University of Texas at Arlington, April 19, 2008.
11. Invited Speaker, "Streaming 3D Databases and Authentication", Navigation Technologies (NavTeq), February 11, 2008.
12. Paneslist & Speaker, Pravasi Bharatiya Divas 2008, January 7-9, 2008, New Delhi.
13. Speaker, School of Engineering and Computer Science Scholars Day, University of Texas at Dallas, March 17, 2007.
14. Speaker, AVID Program, Franford Middle School, Plano ISD, March 30, 2007.
15. Invited Speaker, Department of Computer Science, University of Texas at Arlington.
16. Panel Member, US Army Research Office (ARO) Proposals Review.
17. Panel Member, NSF CISE Panel.
18. Panelist & Speaker, Pravasi Bharatiya Divas 2008, January 7-9, 2008, New Delhi.
19. Invited speaker ("Research in 3D Motion Capture Data"), Gaming Conference, UT Dallas, January 19, 2007.
20. Invited participant and speaker, Dagstuhl Seminar on *Future* Directions in Multimedia Research, Dagstuhl Castle, Germany, March 2005.
21. Tutorial speaker in ACM Multimedia Conferences:
    (a) ACM International Conference on Multimedia Retrieval (ICMR 2012), Hong Kong, June 2012, *3D Video Segmentation, Recognition, and Retrieval*.
    (b) ACM Multimedia, October 2008, Vancouver, Canada: *Storage, Retrieval, and Communication of Body Sensor Network Data*
    (c) ACM Multimedia 2001 Conference, Ottawa, Canada: *Scalable Multimedia servers*.
    (d) ACM Multimedia 2000 Conference, Los Angeles, November 2000: *Scalable*

> *Multimedia Servers*.
>
> (e) ACM Multimedia'99 Conference, Orlando, November 1999: *Adaptive Multimedia Presentations*.
>
> (f) ACM Multimedia'98 Conference, Bristol, UK, September 1998: *Managing Resources For Multimedia Presentations*.

22. Tutorial speaker, International Conference on Distributed Multimedia Systems (IDMS 2000), Enschude, Netherlands.
23. Invited participant and speaker, Dagstuhl Seminar on *Network* Resource Management and Multimedia Synchronization, Dagstuhl Castle, Germany, July, 1997.

IV. External Funding

1. "Robustness Studies in 3D Camera Data", US Army Research Office (ARO), PI: B. Prabhakaran, $360,000, June 2017 – May 2020.
2. "MRI: Development of a Cloud Based Instrument for Heterogeneous Biomedical Body Sensor Systems", National Science Foundation (NSF), UTD PI: B. Prabhakaran, California State University at Fresno PI: Ming Li, $400,000 (UTD Share: $80,000), October 1, 2016 – September 30, 2019.
3. "Feasibility and Functional Outcomes of a Novel Home-Based Rehabilitation Coach System for Patients with Mobility Impairment Post-Stroke", $80,000 (UTD Share: $32,150), Mobility Foundation and Dallas Veterans Affairs Research Corporation (DVARC), UTD PI: B. Prabhakaran (Dallas Veterans Affairs PIs: Dr Thiru Annaswamy and Dr Una Makris), August 2016.
4. "Robust 3D Surveillance", US Army Research Office (ARO) STIR (Short Term Innovative Research), PI: B. Prabhakaran, $50,000, May 1, 2016 – January 31, 2017.
5. "Situation-Aware Collaborative Tele-Immersion and Gaming Environment and Resources (SAC-TIGER) Framework for Scalable Tele-Rehabilitation", US IGNITE (administered by National Science Foundation), $298,893 (2014-2017)
6. "Investigations on Multimedia Transport Protocol", $8000, TIN Consulting (2014).
7. "Investigations on Recognition of Aircraft Registration Numbers", $3000, Airside Logix (2014).
8. "NetSE:Large:Collaborative: Exploiting Multi-modality for 3D Tele-immersion", National Science Foundation (NSF), (PI: B. Prabhakaran), 2010-2015, Total budget: $2.4 million; UTD Budget: $1.58 million. UTD Co-PIs: Xiaohu Guo, Roozbeh Jafari, and Mark Spong. (Other Collaborators: University of Illinois, Urbana-Champaign, Dallas Veterans Affairs (VA), and University of California, Berkeley).
9. "Emotion Based Content Recommendation System", Funded Research with Alcatel-Lucent (Plano, Texas) and UTD Mobile Lab (ATEC: Prof Dean Terry), Supports 2 Graduate RAs of B. Prabhakaran for 1 year (2011-2012).
10. "Pico Life: Augmented, Multi-player 3D Mobile Gaming World", PI: X. Guo; Co-PI: B. Prabhakaran, Texas Instruments, $50,000, 2010-2011.
11. "Haptic Guidance for Breast Biopsy Systems**,** Medical Technology Consortium (Texas Health – Texas Instruments – UT Arlington – UT Dallas) Grant, $100,000, 2010. (PI: Venkat Devarajan; Co-PI: B. Prabhakaran; UTD Part: $50,000).
12. "Visible Speech", (PI: B. Prabhakaran), Neural Technology Center, University of Texas at Dallas, $20,000, 2010.
13. Funded Research with Alcatel-Lucent (Plano, Texas) and UTD Mobile Lab (ATEC: Prof

Dean Terry), Supports 2 Graduate RAs of B. Prabhakaran for 1 year (2010-2011).

14. Funded Research with QuEST Forum, Supports 1 Graduate RA of B. Prabhakaran for 2 years (2010-2011).
15. Funded Research with Callier Center, UTD. Supports 1 RA per year, PI: B. Prabhakaran, 2008-2011.
16. "Interactive Video System", Texas RCIC Funding Through 2cimple Interactive Inc., PI: B. Prabhakaran, $30,000, 2009.
17. "Assessment and Scoring of the Test of Strategic Learning (TOSL)", Center for Brain Health, UTD, $25,000, PI: B. Prabhakaran, 2009.
18. "Secure Semantic Grids for Network Centric Operations. Sub-topic: Analyzing Terror Networks" Air Force Office of Scientific Research (AFOSR) Congressional Funding, Co-PI: B. Prabhakaran, PI: Bhavani Thuaraisingham, $100,000, 2008-2011, (Other Co-PIs at UTD for other sub-topics: M. Kantarcioglu, L. Khan, I.L. Yen).
19. "GPS in-building penetration and Inertial Navigation Sensors", Texas Instruments, $30,000, PI: B. Prabhakaran, 2008.
20. "ACM Special Interest Group on Multimedia (SIGMM) Online Multimedia Community", Association of Computing Machinery (ACM), $56,616, PI: B. Prabhakaran., 2008-2011.
21. "MobileLab: Ericsson Project", Ericsson, Co-PI: B. Prabhakaran, PI: Dean Terry, $100,000, 2008-2010.
22. "Mobile Video Portal", PI: B. Prabhakaran, Consortium of 3 Industry Partners - Alliance Systems, Bay Talkitek,and Dialogic; $104,115.
23. "MobileLab TI Project", Texas Instruments, Co-PI: B. Prabhakaran, PI: Dean Terry, $130,000.
24. "Culture and Motion Capture - an HTS Application (CMICHA)", BAE Systems/ US Army Space and Missile Defense Command (USASMDC), PI: Thomas E. Linehan, Co-PIs: A. Blanchard & B. Prabhakaran, $323,965, 1/5/2007 – 9/30/2007.
25. "Storage, Retrieval, and Delivery of 3D Models and Multi-attribute Motion Data", PI: B. Prabhakaran, Army Research Office (ARO). Program: Discrete Mathematics and Computer Graphics, Mathematics Division. $240, 000, September 2005 - August 2008.
26. "3D Watermarking", PI: B. Prabhakaran, AT&T Foundation, $33,333, December 2004 - June 2006.
27. PI, "*CAREER: Animation Databases*", US National Science Foundation(NSF) CAREER Grant, IIS-0237954, $440,500, 2003-2008.
28. International Collaboration Partner, " Study on the Platform for QoS guaranteed Traffic Engineering and Multimedia Service under Next Generation Wired/Wireless Integrated Network Environment", Korea IT Industry Promotion Agency, 2003/8/1 - 2007/7/31, $5.5 million (multi- party project with several universities).
29. Co-PI, "TL 9000 Registration Repository System (RRS) for QuEST Forum", Quality Excellence for Suppliers of Telecommunications (QuEST) Forum, (approximately) $1 million, 2002-present. PI: D. Harris.
30. Investigator, Clark Foundation grant for Scheduling delivery of multimedia information. Investigators: B. Prabhakaran and R.N. Uma. Grant amount $48,000, 2002.
31. Funded research with Texas Instruments, through the Embedded Software Center: Software component repository, 2001-2002.
32. Funded research with Alcatel USA; funded through the Embedded Software Center: Web-server load balancing. Supported a Research Assistant for 1 year, 2002.

UT Dallas Internal Seed Grants:
1. "In-home Rehabilitation", $35,000, Seed Funding from Dean, Erik Jonsson School of Engineering and Computer Science, UT Dallas, 2016.
2. "School of Engineering Service Award for Computer Science Department", B. Prabhakaran, $25,000, 2007-2008.
3. "Haptics and Virtual Reality Laboratory", B. Prabhakaran, K. Zhang, X. Guo, and D.T Huynh, Project Emmit Grant, $500,000, November 2007.
4. "ACM Multimedia and Security 2007 Workshop Seed Grant", B. Prabhakaran, Project Emmit Grant, $4000, September 2007.
5. "Archiving 3D Motions", PI: B. Prabhakaran, Project Emmit grant, $30,000, December 2006.
6. "NeTS-ProWIN: Interference Aware Adhoc Networks", PI: B. Prabhakaran, Project Emmit grant, $75,000, March 2005 - August 2006.
7. "Supplemental Funding for MoCap Lab", PI: B. Prabhakaran, Co-PI: Mihai Nadin, Project Emmit grant, $22,000, July 2005.
8. "Motion Capture and Virtual Reality Laboratory", PI: B. Prabhakaran, Co-PI: Thomas E. Linehan, Project Emmit grant, $300,000, August 2004.

Grants in Other Appointments:
9. PI, Academic Research Grant RP 3981669, on Multimedia documents-on-demand servers, National University of Singapore, S$122,000, July 1998-2000.
10. PI-in-charge for the Project on Education and Research in Computer Networking (ERNET), for brief periods. Sponsors: Department of Electronics (DoE, Govt. of India) and the United Nations Development Program (UNDP).
11. PI-in-charge for research based consultancy on distributed databases for the Department of Telecommunications (DoT, Govt. of India), for brief periods.

Teaching

I. Students Supervised

A. Graduated PhD Students: (with last known jobs)

1. Myunghoon Suk, "Study of Real-Time Facial Expression Recognition in Noisy Images and Videos", August 2018 (Research Engineer, Topazlabs).
2. Yuan Tian, "Haptic Rendering in 3D Immersive Virtual Environment", 2017. ((Jointly supervised with Dr Xiaohu Guo) (Research Engineer, Midea Robotics).
3. Arvind Balasubramanian, "Mining Patterns in Sensor Data For Personalized Healthcare", 2017 (Data Scientist, Expedia Inc).
4. Suraj Raghuraman, "i3DTI: Interactive 3D Tele-Immersion", 2017. (Founder: MobiWeb)
5. Ranran Feng, "Sum of Facial Parts Tells More Than The Face? Study of Impacts of Fashion Alterations On Facial Identity", 2014, Image Vision Labs. **(Best Teaching Assistant for Year 2013).**
6. Duk-Jin Kim: *Faulty and Missing Sensor Data Analysis*, 2012, Data Scientist, QuEST Forum.
7. Ziying Tang: *Real-time Streaming for Collaborative Interactions* (Jointly supervised

with Dr Xiaohu Guo) – tenure-track faculty, Towson University, Maryland - 2010.

8. Yang Liu: *Spectral Analysis on Manifold and Applications* (Jointly supervised with Dr Xiaohu Guo) – Engineer, nVidia Graphics - 2010.
9. Gaurav N. Pradhan, ("On Analyzing Multiple, Physiological Sensor Databases", 2008. (Associate Professor, Mayo Clinic College of Medicine, Phoenix, AZ)
10. Yohan Chin ("Knowledge Analysis & Application to Multimedia Content Recognition Problems" – Data mining Research, MySpace.com, FoxTV), 2008.
11. Junqiang Zhou ("Guarding Algorithm and Robust Video Surveillance" – Software Design Engineer, ASML Inc.,). Jointly supervised with Prof Simeon Ntafos, 2007.
12. Agarwal, Parag ("3D Content Protection" - FairWarning, Inc. – a start-up on medical security software), 2007.
13. Li, Chuanjun ("Efficient 3D Motion Pattern Retrieval in Large Motion Capture Databases"). **Best PhD Dissertation Award for Year 2006**. (Jointly supervised with Prof SQ Zheng). Currently: Post-doc at Brown University, Supervisor: Prof Andy van Dam.
14. Li, Hui ("Streaming 3D Progressive Meshes over Lossy Networks"). Currently: Research Engineer at Ask.com.
15. Li, Ming ("Interference Aware QoS Strategies In IEEE 802.11 Wireless Networks"). **Best Teaching Assistant Award for Year 2006**. Currently: Assistant Professor, California State University, Fresno.

B. Current Doctoral Advisement:

1. Myunghoon Suk: *Multi-modal Approaches to Facial Emotion Recognition*
2. Kevin Parag Desai: *3D Tele-Immersion*
3. Kanchan Bahirat: *Handling Occlusion in 3D Tele-Immersion*
4. Shanthi Vellingiri: *Collaborative Haptics Environments*
5. Rittika Shamsuddin: *Health-data Analytics*
6. Barbara Mukami Maweu, *Health-data Analytics*.

D. Completed MS Disssertations

1. Kumar Hiranya Garbha, "Finger-Tip Recognition for 3D Mixed Reality Applications", 2018.
2. Lakshmi Sharma, "Learn DNA: An interactive VR application for learning DNA structure", 2018.
3. Sudhir Ramalingam, "Importance of Interaction in Interactive 3D Tele-Immersion", 2016.
4. Cameron H. Watkins, "Sensor Driven Realtime Animation for Feedback During Physical Therapy", 2015.
5. Ganesh Salvi, "Storage and Retrieval of Multimodal 3D Tele-Immersion Data", 2014.
6. Satwant Singh, "Targeted Facial Feature Detection and Matching Using HAAR and SIFT", 2012.
7. Ramprasad Srinivasan, "Enhanced Active Shape Model Using Texture Information In Profile Model", 2011.
8. Anantkumar Patel, "Haptic Guided Biopsy Framework", 2011.
9. Sancho Sebastine, "Semantic Web for Content Based Video Retrieval", 2010.

10. Ashok Ramdas, "Feature Extraction Method for video based human action recognitions: Extended optical flow Algorithm", 2010.
11. Manoj Garg, "*Network Aware Energy-Efficient Communication (NAEEC) Protocol for Heterogeneous Wireless Sensor Networks*", 2009.
12. Amruthraj Belaldavar, "*American Sign Language Generator*", 2008.
13. Pawar, Manoj, "*Content Based Querying and Searching for 3D Human Motions*", 2007.
14. Park, Gyetae, "*Novel Multi-channel Assignment of Wireless Mesh Networks*", 2007.
15. Agrawal, Sameer, "*Error Concealment Scheme for Loss Tolerant 3D Progressive Meshes*", 2006.
16. Naik, Sagar S., "*3D Shape Retrieval*", 2006.
17. Prakash, Arun, "*Visuaization of Animation Databases*", 2006.
18. Ramaswamy, Vivek Shankar, "*Demand-Driven Retrieval Schedules for Progressive Transmission of 3D Animations*", 2006.
19. Jain, Anshuman, "*Adaptive Packet Bursting Scheme for Handling QoS in Multi-rate Multi-hop AdHoc networks*", 2005.
20. Kulkarni, Punit R., "*An Efficient Pattern Isolation and Recognition System for Multi-Attribute Streaming Data*", 2005.
21. Lalwani, Ashok J., "*Interference-aware Routing in Wireless Ad Hoc Networks*", 2005.
22. Pradhan, Gaurav N., "*Indexing and Compression of Multi-Attribute Variable Length Multi-Dimensional Motion Data*", 2005.
23. Rajagopalan, Srinivas, "*Reduction of Search Space for Collision Detection in Animation Authoring Environments*", 2005.
24. Ramesh, Shwetha, "*Interference-Aware Topology Control in Wireless Ad- Hoc Networks*"
25. Shah, Parinkumar D., "*View Dependent Partition Based 3D Model Streaming*", 2005.
26. Shankar, Venkatesh, "*Providing QoS Support in Multi-Hop Ad Hoc Networks*", 2005.
27. Zhai, Peng, "*Animation Data Translation Based on Schema Matching*", 2005.
28. Krishna Rangarajan, "*3D Modeling*", 2004.
29. Phani S Kotharu, "*Partial Fuzzy Query Resolution for Animation Authoring*", 2004.
30. Sukumar Ramraj, "*Combinatorial Scheduling Algorithms To Sequence Information Delivery*", 2003.
31. Satish Sathyamurthy, "*End-to-End QoS Guarantee in Heterogeneous Wired-Cum-Wireless Networks*", 2003.
32. Nutan Chokka Reddy, "*3D Model Matching*", 2003.
33. Mythreyi Vattikuti, "*XML-Based Toolkit for Reusing Multi-format* Animations", 2003.
34. Deepa S. Shankar, " *Development of Collaborative Framework Enabling* Content Adaptation on Internet Data", 2003.
35. Veerdhawal Pande: "*Dynamic Content Generation Using Collaborative* Caching", 2003.
36. Deeptichand Parvathaveni (Jointly supervised with Dr R.N. Uma), "Placement of Replicated Continuous Media Objects", 2003.
37. Narayanan Annamalai, (Jointly supervised with Dr Gopal Gupta), "*An* Extensible Transcoder for HTML to VoiceXML Conversion", 2002.
38. J. Jagannatha Rao, *"Configurable Framework for Collaborative* Applications Management", 2002.
39. Subbiah Shenbagaraman (Jointly supervised with Dr S. Venkatesan), "*Tracking Mobile Devices in Cellular Networks using Forward Link*", 2002.

40. Tu Yuguang (National University of Singapore):   *"Object-level Scalable* Web Servers",
2000.

II. CLASSROOM TEACHING

1.   2017 Fall, Multimedia Systems
2.   2017 Spring, Video Analytics
3.   2016 Fall, Multimedia Systems
4.   2016 Spring, Video Analytics
5.   2015 Fall, Multimedia Systems
6.   2015 Spring, Video Analytics
7.   2014 Fall, Multimedia Systems
8.   2014 Spring, Video Analytics
9.   2014 Spring, Tele-medicing and Health-care Data Analytics
10. 2013 Spring, Video Analytics
11. 2013 Sprring, Tele-medicine and Health-care Data Analytics
12. 2012 Fall, Multimedia Systems
13. Sabattical in Spring 2012
14. Sabattical in 2011 Fall
15. 2011 Spring, Multimedia Systems
16. 2010 Fall, Advanced Operating Systems
17. 2010 Spring, Multimedia Systems
18. 2010 Spring, Computer Animation
19. 2009 Fall, Advanced Operating Systems
20. 2009 Spring, Multimedia Systems
21. 2009 Spring, Computer Animation
22. 2008 Fall, Advanced Operating Systems
23. 2008 Spring, Multimedia Systems
24. 2008 Spring, Game Programming
25. 2007 Fall, Advanced Operating Systems
26. 2007 Spring Computer Animation
27. 2007 Spring Advanced Operating Systems
28. 2006 Fall, Multimedia Database Management Systems
29. 2006 Spring, Advanced Operating Systems
30. 2006 Spring, Discrete Mathematics II
31. 2005 Fall, Recent Advances in Multimedia Database Management Systems
32. 2005 Spring, Advanced Operating Systems
33. 2005 Spring, Discrete Mathematics II
34. 2004 Fall, Advanced Operating Systems
35. 2004 Spring, Advanced Operating Systems
36. 2003, Spring, Advanced Operating Systems
37. 2002, Fall, Advanced Operating Systems
38. 2002, Spring, Advanced Operating Systems
39. 2001, Fall, Advanced Operating Systems
40. 2001, Spring, Programming in Java

Teaching at Other Universities
1. 1998, Fall - 2000 Spring: Computer Networks, National University of Singapore.
2. 1998, Spring, Hypermedia Information Systems, National University of Singapore.
3. 1997, Spring, Telecommunication Protocol Design, University of Maryland, College Park, USA.
4. 1994, Spring - Fall, Computer Networks, Indian Institute of Technology, Chennai (formerly, Madras), India.
5. 1993, Fall, Programming & Data Structures, Indian Institute of Technology, Chennai, India.

Services

Summary of Professional Community Services:

1. *Selected Editorial Board Memberships*: Associate Editor, IEEE Transactions on Multimedia; Associate Editor, Multimedia Systems Journal, Springer Publishers, USA; Editor, International Journal of Multimedia Tools and Applications, Springer (earlier, Kluwer Academic) Publishers, Boston, MA, USA; Editor-in-chief, ACM SIGMM Online Magazine; Journal of Multimedia, Academy Publishers; Guest-editor, special issue on *Multimedia Semantics*, Journal of Signal Processing Systems, Springer, 2010.

2. *General Co-Chair* of IEEE ICHI (International Conference on Health Informatics) 2015; IEEE HAVE (Haptic, Audio-Visual Environments and Games) 2014; ACM ICMR (International Conference on Multimedia Retrieval) 2013; ACM Multimedia 2011; ACM Multimedia and Security Workshop (MMSec) 2007.

3. *Technical Program Chair* of IEEE International Conference on Multimedia and Expo (ICME) 2017; IEEE ICHI (International Conference on Health Informatics) 2014; IEEE WoWMoM (World of Wireless and Multimedia) 2012; IEEE ISM (International Symposium on Multimedia) 2010.

4. *Steering/Executive Committee Membership*: Executive Committee Member of ACM SIGMM (Special Interest Group on Multimedia); Steering Committee Member of the International Conference on Multimedia Retrieval (ICMR); Steering Committee Member of ACM IH & MMSec (Information Hiding and Multimedia Security).

I. Professional Services
   A. Journal Related Services:
1. Associate Editor, IEEE Transactions on Multimedia, 2015 – till present.
2. Editor-in-chief, ACM SIGMM Online Magazine.
3. Member, Editorial Board, Multimedia Systems Journal, Springer.
4. Member, Editorial Board, Journal of Multimedia, Academy Publishers.
5. Member, Editorial Board, International Journal of Multimedia Data Engineering and Management, Information Resources Management Association (IRMA).
6. Member of the Editorial Board of the Encyclopedia of Multimedia, Springer.
7. Member of the editorial board for the Journal of Multimedia Tools and Applications, Springer Publishers, Boston, MA, USA, 1995 - present.
8. Member, Editorial Board, Advances in Multimedia, Hindawi Publishers
9. Guest-editor, special issue on Video Analytics: Challenges, Algorithms, and Applications,

IEEE Transactions on Multimedia, May 2018.

10. Guest-editor, special issue on *Multimedia Semantics*, Journal of Signal Processing Systems, Springer, scheduled early 2010.
11. Guest-editor, special issue on *Multimedia* Authoring *& Presentation Techniques*, for ACM Multimedia Systems journal, May 2000.
12. Guest-editor, special issue on *Techniques for multimedia Presentation*, for the Journal of Multimedia Tools and Applications, November 2000.
13. Guest-editor, special issue on *Mobile Computing Environments for Multimedia Systems*, Journal of Multimedia Tools and Applications, July 1999.
14. Reviewer, National Research Foundation, Singapore, 2008.
15. Reviewer, ACM Transactions on Management Information Systems.
16. Reviewer, Graphical Models, Elsevier Publishers
17. Reviewer, IEEE Transactions on Visualization and Computer Graphics (TVCG), 2009.
18. Reviewer, ACM Transactions on Multimedia Computing, Communications and Applications (TOMCCAP), 2008.
19. Reviewer, Journal of Systems Software, 2008.
20. Reviewer, IEEE Transactions on Digital Forensics and Security, 2008.
21. Reviewer, IEEE Transactions on Multimedia, 2008.
22. Reviewer, Knowledge and Information Systems, 2008.
23. Reviewer, International Journal on Computer Vision, 2008.
24. Reviewer, Journal of Information and Software Technology, 2008.
25. Reviewer, Journal of Electronic Imaging (JEI), 2008.
26. Reviewer, Journal of Visual Languages & Computing, 2008.
27. Reviewer, ACM Transactions on Multimedia Computing, Communications and Applications (TOMCCAP), 2007.
28. Reviewer, IEEE Transactions on Digital Forensics and Security, 2007.
29. Reviewer, IEEE Transactions on Multimedia, 2007.
30. Reviewer, IEEE Journal on Selected Areas in Communication, 2007
31. Reviewer, Machine Vision and Applications Journal, 2007.
32. Reviewer, IEEE MultiMedia, 2007.
33. Reviewer, International Journal of Network Management, 2007.
34. Reviewer, IEEE Transactions on Computers, 2007
35. Reviewer, Computer & Graphics Journal, 2007.
36. Reviewer, IEEE Transactions on Digital Forensics and Security. 2006
37. Reviewer, IEEE Journal on Selected Areas in Communication, 2006
38. Reviewer, Machine Vision and Applications Journal, 2006
39. Reviewer, IEEE MultiMedia, 2006
40. Reviewer, International Journal of Network Management, 2006
41. Reviewer, IEEE Transactions on Computers, 2006
42. Reviewer, Very Large Databases (VLDB) Journal, 2005.
43. Reviewer, ACM Transactions on Multimedia Computing, Communications, and Applications, 2005.
44. Reviewer, ACM/Springer-Verlag Multimedia Systems, 2004.

B. Review, Panel, and Other Committee Services:
1. Panelist, Natinal Science Foundation (NSF), 2017.

2. Panelist, National Science Foundation (NSF), 2015.
3. Co-Chair, IEEE Technical Committee on Multimedia Computing (TCMC) Special Interest Group on Video Analytics (SIGVA).
4. External Rviewer, Full Professor Promotion Review, City University of Hong Kong, 2014.
5. External Reviewer, Full Professor Promotion Review, University of Texas Southwestern Medical Center, Dallas, Texas, 2014.
6. External Reviewer for PhD Dissertation, National University of Singapore, Singapore, 2014.
7. External Examiner for PhD Dissertation, Bharathi Dasan University, India, 2014.
8. External Reviewer, Tenure Review, Nanyang Technological University, Singapore.
9. Panel Member, NSF CISE Panel, 2011.
10. External examiner for PhD Dissertation, University of Ottawa, Canada, 2010.
11. External examiner for PhD Dissertation, National Institute of Technology, Calicut, India, 2010.
12. Panel Member, American Association for the Advancement of Science, 2010.
13. Panel Member, NSF CISE Panel, 2009.
14. Panel Member, NSF CISE Panel, 2008
15. External Reviewer, Tenure Review, University of Alabama in Huntsville.
16. External Reviewer, Tenure Review, National University of Singapore, Singapore.
17. Panel Member, US Army Research Office (ARO) proposal review.
18. Panel Member, NSF CISE Panel, 2007.
19. Paneslist & Speaker, Pravasi Bharatiya Divas 2008, January 7-9, 2008, New Delhi.
20. Reviewer, US Army Research office (ARO) Proposals.
21. Member, NSF Review Panel, Information & Data Management (IDM) 2004.
22. Member, NSF Review Panel, March 2003.
23. Member, NSF Review Panel, February 2003.
24. Member, National Science Panel (NSF) Review Panel, December 2002.

C. Conference Related Services:
1. Member, Steering Committee, ACM International Conference on Multimedia Retrieval (ICMR).
2. Member, Steering Committee, ACM International Conference on Health Informatics (ICHI).
3. Co-Chair, Open Source Software Competition, ACM Multimedia, Seoul, Korea, 2018.
4. Area Chair, IEEE International Conference on Multimedia and Expo (ICME), San Diego, CA, July 2018.
5. General Chair, 3rd International Workshop on Interactive and Spatial Computing (IWISC), Dallas, TX, April 2018.
6. Demonstrations Chair, ACM Multimedia, Mountain View, CA, October 2017.
7. Member, Program Committee, IEEE International Conference on Image Processing (ICIP), Beijing, China, September 2017.
8. Technical Program Committee (TPC) Co-Chair, IEEE International Conference on Multimedia and Expo (ICME), Hong Kong, July 2017.
9. Member, Program Committee, ACM Multimedia Systems (MMSys), 2016, 2017.
10. Area Chair, IEEE International Conference on Pattern Recognition (ICPR) 2016, 2017.

11. Plenary Speaker, Mexican Conference on Pattern Recognition (MCPR) 2016
12. Publicity Chair, ACM International Conference on Multimedia Retrieval (ICMR) 2016
13. Proceedings Chair ACM Multimedia (MM) 2016
14. General Co-Chair, IEEE International Conference on Health Informatics (ICHI) 2015
15. Area Chair, IEEE International Symposium on Multimedia (ISM) 2015
16. General Co-Chair, IEEE International Conference on Health Informatics (ICHI 2015), October 2015, Dallas, Texas.
17. Co-Chair, High Risk, High Reward papers, ACM Multimedia 2014.
18. General Chair, IEEE 2014 International Symposium on Haptic Audio Visual Environments and Games (HAVE 2014).
19. TPC (Technical Program Committee) Co-Chair, Systems Track, IEEE International Conference on Health Informatics (ICHI) 2014, September 2014, Italy.
20. Workshop Co-Chair, IEEE International Symosium on Multimedia (ISM) 2014.
21. Member, Program Committee, IEEE ICASSP (International Conference on Acoustics, Speech, and Signal Processing) 2014 and 2015.
22. General Co-Chair, ACM International Conference on Multimedia Retrieval (ICMR), Dallas, TX 2013.
23. Publicity Co-Chair, IEEE International Symosium on Multimedia (ISM) 2013.
24. Member, Program Committee, 14th IEEE Symposium on World of Wireless, Mobile and Multimedia Networks (WoWMoM 2013).
25. Member, Steering Committee, ACM Information Hiding & Multimedia and Security (IH & MMMSec).
26. Member, Program Committee, 14th IEEE Symposium on World of Wireless, Mobile and Multimedia Networks (WoWMoM 2013).
27. Member, Program Committee, IEEE International Conference on Semantic Computing (ICSC), 2013.
28. Member, Program Committee, IEEE 2012 Interational Symposium on Haptic Audio Visual Environments and Games (HAVE 2012).
29. Member, Program Committee, IEEE International Conference on Healthcare Informatics 2013 (ICHI 2013), Philadelphia, USA.
30. Area Chair of Multimedia Communication and Computing, ISPAN 2012 - International Symposium on Pervasive Systems, Algorithms, and Networks (ISPAN), December 2012.
31. Member, Program Committee, Eighth IEEE International Workshop on Multimedia Information Processing and Retrieval (MIPR-2012), December 2012.
32. Demo Co-Chair, IEEE International Symosium on Multimedia (ISM) 2012.
33. Technical Program Co-Chair, 13th IEEE Symposium onÂ a World of Wireless, Mobile and Multimedia Networks (WoWMoM 2012).
34. Member, Program Committee, ACM Information Hiding & Multimedia and Security 2013, ACM Multimedia and Security (ACM MM&Sec) 2012, ACM MM&Sec 2011, and ACM MM&Sec 2010
35. Co-Chair, Best Paper Award Committee, IEEE International Symposium on Multimedia (ISM'11).
36. General Co-Chair, ACM Mutimedia 2011.
37. Member, Technical Program Committee, Wireless Health 2011.
38. Member, Technical Program Committee, IEEE International Workshop on Semantic Multimedia (ICSC-SMM'11) in conjunction with the Fifth IEEE International Conference

on Semantic Computing.

39. Program Co-Chair, IEEE International Symposium on Multimedia (ISM) 2010, December 2010, Taiwan.
40. Member, Program Committee, 1st ACM International Conference on Health Informatics (IHI'10) and IHI 2011.
41. Member, Program Committee, ACM Multimedia 2010, October 2010, Florence, Italy.
42. Member, Program Committee, IEEE International Symposium on Haptic Audio Visual Environments and Games (HAVE 2010),
43. Workshop Co-Chair, Fourth IEEE International Conference on Semantic Computing (ICSC'10), September, 2010, Pittsburgh, PA.
44. Track co-Chair, *Multimedia and Peer-to-Peer Networking (MP2P),* the 19th IEEE International Conference on Computer Communications and Networks (ICCCN 2010), to be held in Zurich, Switzerland in August 2010.
45. Member, Program Committee, 3rd International Conference on PErvasive Technologies Related to Assistive Environments (PETRA 2010), Samos, Greece, June 2010 and PETRA 2011..
46. General Chair, IEEE Workshop on Multimedia and Semantic Technologies (MUST 2010), Busan, Korea, May 2010.
47. *Special Session Co-Chair, Processing Data Streams from Body Sensor Networks, ACM International Conference on Multimedia Information Retrieval (MIR), Philadelphia, March 2010.*
48. General Chair, IEEE-DSMSA 2009 Workshop (The IEEE International Workshop on Data Semantics for Multimedia Systems and Applications), hosted along with IEEE International Symposium on Multimedia (ISM) 2009.
49. Member, Program Committee, The Fifth IEEE International Workshop on Multimedia Information Processing and Retrieval (MIPR-2009), San Diego, California, USA, December 14-16, 2009
50. General Co-Chair, Workshop on Next Generation Networks, WonGen'08, Bangalore, India.
51. General Co-Chair, Workshop on Multimedia Aspects in Pervasive Healthcare (MMPH'09), in conjunction with IEEE International Conference on Multimedia and Expo (ICME), 2009.
52. General Co-Chair, Workshop on Pervasive Computing Systems and Infrastructures (PCSI), April 2009.
53. Session Chair, ISM2009 (IEEE International Symposium on Multimedia), San Diego, CA.
54. Panel Chair, ISM2009 (IEEE International Symposium on Multimedia), San Diego, CA.
55. Session Chair, International Conference on Semantic Computing (ICSC) 2009, Berkeley, CA.
56. Panel Co-Chair, International Conference on Semantic Computing (ICSC) 2009, Berkeley, CA.
57. Member, Program Committee, ACM Multimedia 2009.
58. Member, Program Committee, ACM Multimedia and Security (ACM MM&Sec) 2009.
59. Member, Program Committee, Pervasive Technolgies Related to Assistive Environments (PETRA'09), June 2009.
60. Member, Program Committee, The First International Conference on Advances in

Multimedia, IARIA, Colmar, France, July 2009.
61. Proceedings Chair, ACM Multimedia 2008, Vancouver, Canada.
62. Workshops Co-Chair for IEEE International Symposium on Multimedia (ISM'08), December 15-17, 2008, Berkeley, CA, USA
63. Publicity Co-Chair, PETRA'08.
64. Track Co-Chair, Multimedia Networking, INTERNATIONAL CONFERENCE ON COMPUTER COMMUNICATIONS AND NETWORKS (ICCCN) 2008.
65. Member, Program Committee, INTERNATIONAL CONFERENCE ON COMPUTER COMMUNICATIONS AND NETWORKS (ICCCN) 2008.
66. Session Chair, ACM Multimedia 2008, Vancouver, Canada.
67. Session Chair, ACM Multimedia Modeling Conference (MMM'08), Kyoto, Japan.
68. Member, Program Committee, ACM Multimedia 2008.
69. Member, Program Committee, ACM Multimedia and Security (ACM MM&Sec) 2008.
70. Member, Program Committee, 9th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks 2008 (WoWMoM 08)
71. Member, Program Committee, International Workshop on Ambient Media Delivery and Interactive Television (AMDIT08).
72. Workshops Co-Chair for IEEE International Symposium on Multimedia (ISM'08), December 15-17, 2008, Berkeley, CA, USA.
73. Member, Program Committee, The Fourth IEEE International Workshop on Multimedia Information Processing and Retrieval (MIPR-2008), December 15-17, 2008, Berkeley, CA, USA.
74. Member, Program Committee, Int conf on Communication, Convergence, and Broadband Networking, during July 15-17, 2008, Bangalore.
75. Member, Program Committee, UBICOMM 2008, the Second International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies, to be held in Valencia, Spain, on September 29 - October 4, 2008.
76. Reviewer, ACM BodyNets 2008
77. General Co-chair, ACM Multimedia Security Workshop, Dallas, September 20-21, 2007.
78. PC Member, ACM Multimedia 2007.
79. Program Vice co-chair of Image and Video Processing Track at 2007 IEEE International Symposium on Multimedia (ISM'07) which will be held in Taiwan on December 10-12, 2007.
80. Special Sessions Organizing Co-Chair, First IEEE International Conference on Semantic Computing (IEEE ICSC2007) September 2007, Irvine, CA.
81. Session Chair, ACM Multimedia 2007, Augsburg, Germany.
82. Session Chair, IEEE Broadnets 2007, Raleigh, NC.
83. Member, Program Committee, ACM Multimedia 2007.
84. Member, Program Committee, UBICOMM 2007, (The First International Conference on Mobile Ubiquitous Computing, Systems, Services, and Technologies).
85. Member, Program Committee, International Conference on Multimedia Systems & Applications (IMSA) 2007.
86. Member, Program Committee, IASTED International Conference on Wireless and Optical Communications (WOC 2007), Montreal, Canada from May 30-June 1, 2007.
87. Member, Program Committee, IEEE BroadNets 2007.
88. Member, Program Committee, International Conference on Multimedia Systems &

Applications (IMSA) 2007.

89. Member, Program Committee, IASTED International Conference on Wireless and Optical Communications (WOC 2007), Montreal, Canada from May 30-June 1, 2007.
90. Member, Program Committee, International MultiMedia Modeling Conference (MMM) 2007
91. PC Member, ACM Multimedia 2004 Conference, November 2006.
92. PC Member, International Workshop on Multimedia and Web Design, 13 December 2004, Miami, Florida, USA.
93. PC Member, ACM Multimedia 2004 Conference Short Papers Track, November 2004.
94. PC Member, Symposium on Document Engineering, McLean, VA, November 2004.
95. Associate Chair, ACM Multimedia, Berkeley, CA, November 2003.
96. Co-organizer, Special Session on Multimedia Authoring and Presentation, IEEE International Conference on Multimedia & Expo, ICME 2003, Baltimore, MD, July 2003.
97. Member, Program Committee, ACM SIGWEB Symposium on Document Engineering, (SDE '01), McLean, VA, November 2002.
98. Member, Program Committee, 8th International Workshop on Multimedia Information Systems (MIS 2002).
99. Member, Program Committee, 15th International Conference on Computer Communication (ICCC 2002), August 2002.
100. Member, Program Committee, Internet and Multimedia Systems and Applications (IMSA) conferences, 2000, 2001, & 2002.
101. Member, Program Committee, Multimedia Computing and Networking 2002 (MMCN'02), San Jose, California, from January 21-25, 2002.
102. Member, Program Committee, IEEE International Conference on Computer Communication and Networks (ICCCN 2001), Scottsdale, Arizona, October 2001.
103. Member, Program Committee, ACM SIGWEB Symposium on Document Engineering, (SDE '01), Atlanta, Georgia, November 2001.
104. Associate Chair: ACM Multimedia'99, Orlando, November 1999 and ACM Multimedia 2000, Los Angeles.
105. Member, Program Committee, International Workshop on Multimedia Database Management Systems, August, 1999, New York State, USA.
106. Member, Program Committee of the International Conference on Internet and Multimedia Systems, Applications (IMSA), Grand Bahamas, October 1999.
107. Member, Program Committee of the Second IASTED/ISMM International Conference on Distributed Multimedia Systems and Applications, Stanford, CA, USA, August 1995.
108. Member, Program Committee, International Workshop on Multimedia Database Management Systems, August 5-7, 1998, Fairborn, OH, USA.
109. Tutorial Chair, Singapore International Conference on Networking (SICON'98), Singapore, July 1998.

II. Administrative Services

1. Member, Strategic Vision, Computer Engineering Program, Erik Jonsson School of Engineering and Computer Science.
2. Member, Assessment Committee, Computer Engineering Program, Erik Jonsson School of Engineering and Computer Science.

3. Director, University of Texas, Dallas Institute for Spatial and Interactive Computing (UT-DIISC) 2015 – present.
4. Director, PhD Studies, University of Texas at Dallas, 2010-present.
5. Member, Faculty Search Committee, Computer Engineering Program, University of Texas at Dallas, 2011.
6. Member, Faculty Search Committee, Computer Science Department, University of Texas at Dallas, 2011.
7. Vice-chair, Academic Calendar Committee, 2008-2010.
8. Member, Faculty Committee for Computer Engineering Program.
9. Internal Reviewer, School of Arts & Humanities Program Review, Spring 2008
10. Member, School-wide Academic Affairs Committee, 2007-2008.
11. Member, Faculty Senate, University of Texas at Dallas, 2006.
12. Chair, Graduates Admissions Committee, Department of Computer Science, University of Texas at Dallas, November 2004 - 2010.
13. Member, Graduates Admissions Committee, Department of Computer Science, University of Texas at Dallas, November 2001 – till date.
14. Member, Teaching Assistants Committeee, Department of Computer Science, University of Texas at Dallas, December 2003 - present.
15. Member, Under-graduate Program Committee, Telecom Engineering Program, University of Texas at Dallas.
16. Member, Outreach Committee, Computer Engineering Program, University of Texas at Dallas.
17. Member, Supervisory Committee of several PhD students.