**CHENGCUI ZHANG, PH.D.**
*Professor*
*SIRI Fellow*
School of Computer Science, University of Alabama at Birmingham, Birmingham, AL 35294
Telephone: (205)-934-8606      Fax: (205)-348-5473      Email: <ins>czhang02@uab.edu</ins>

## PROFESSIONAL PREPARATION

| | | |
|---|---|---|
| ZheJiang University | Computer Science | B.S., 1996 |
| (HangZhou, ZheJiang, P.R.China) | | |
| ZheJiang University | Computer Science | M.S., 1999 |
| Florida International University | Computer Science | Ph.D., 2004 |

## APPOINTMENTS

- Primary Appointment:

    10/2015-present    Professor, Computer and Information Sciences Department, University of Alabama at Birmingham

    10/2010-9/2015    Associate Professor, Computer and Information Sciences Department, University of Alabama at Birmingham

    08/2004-09/2010    Assistant Professor, Computer and Information Sciences Department, University of Alabama at Birmingham

- Secondary Appointment:

    Center for Information Assurance and Joint Forensics Research, Data Science pillar, Univ. of Alabama at Birmingham

    School of Engineering, Adjunct Faculty, Univ. of Alabama at Birmingham

    Computational Biology Center, University of Alabama at Birmingham

    Internal Advisory Board of the National Spinal Cord Injury Statistical Center (NSCISC)

## RESEARCH INTERESTS

Multimedia Information Retrieval, Multimedia Databases, Computer Forensics and Security, Data Mining, Bioinformatics, and GIS.

## MEMBERSHIP

IEEE and ACM member: 2000-present
IEEE Women in Engineering: 2003-present
ACM-W: 2016 - present

## PUBLICATIONS

*Number of Publications:* Refereed Journals (**60** – **10** *IEEE Transactions papers*), Refereed

Conferences/Workshops (**116**), Refereed Posters and Abstracts (**7**), Refereed Book Chapters (**6**), and Refereed

Presentation (**1**).

## REFEREED BOOK CHAPTERS

1.  Richa Tiwari, Chengcui Zhang, Thamar Solorio, and Wei-Bang Chen "A Supervised Machine Learning Approach of Extracting and Ranking Published Papers Describing Coexpression Relationships among Genes," Edited by Özyer, Tansel; Mehr, Keivan Kian; Tan, Mehmet, Recent Trends in Information Reuse and Integration, Springer-Verlag, 2012, ISBN 978-3-7091-0737-9.
2.  Wei-Bang Chen and Chengcui Zhang, "Handbook of Research on Dental Computing and Applications: Advanced Techniques for Clinical Dentistry." PP. 134-145. Edited by Dr. Andriani Daskalaki, IGI Global, 2009, ISBN-10: 1605662925.
3.  Min Chen, Shu-Ching Chen, Mei-Ling Shyu, and Chengcui Zhang, "Video Event Mining via Multimodal Content Analysis and Classification," Edited by Valery A. Petrushin and Latifur Khan, Multimedia Data mining and Knowledge Discovery, Springer-Verlag, 2007, ISBN: 978-1-84628-436-6.
4.  Mei-Ling Shyu, Shu-Ching Chen, Chengcui Zhang, "A Stochastic Content-Based Image Retrieval Mechanism," Edited by Sagarmay Deb, Multimedia Systems and Content-based Image Retrieval, pp. 302-320, Idea Group Publishing, 2004, ISBN: 1-59140-265-4.

5. Xin Huang, Shu-Ching Chen, Mei-Ling Shyu, and Chengcui Zhang, "Mining High-Level User Concepts with Multiple Instance Learning and Relevance Feedback for Content-Based Image Retrieval," Edited by Osmar R. Zaïane, Simeon J. Simoff, Chabane Djeraba, Mining Multimedia and Complex Data, pp. 50-67, Springer Verlag, Lecture Notes in Artificial Intelligence Volume 2797, 2003, ISBN:3-540-20305-2.

6. Shu-Ching Chen, Mei-Ling Shyu, and Chengcui Zhang, "Innovative Shot Boundary Detection for Video Indexing," Edited by Sagarmay Deb, Video Data Management and Information Retrieval, pp. 217-236, Idea Group Publishing, 2005, ISBN: 1-59140546-7.

## REFEREED JOURNAL PUBLICATIONS

1. Sandeep Bodduluri, Surya Bhatt, Praneeth Reddy Amudala Puchakayala, Arie Nakhmani, Chengcui Zhang, Faizyab Chaudhary, Joe Reinhardt, and Abhilash Kizhakke Puliyakote, "Radiomics for Improved Detection of COPD in Low-Dose and Standard-Dose Chest CT Scans," accepted for publication, Radiology, 2023. **[Impact Factor: 29.15]**

2. Vivek V. Shukla, AKM Fazlur Rahman, Xuejun Shen, Allison Black, Nitin Arora, C. Vivek Lal, Edward F. Bell, Arie Nakhmani, Chengcui Zhang, Namasivayam Ambalavanan, and Waldemar A. Carlo, "Trends in Fetal and Neonatal Outcomes During the COVID-19 Pandemic in Alabama," accepted for publication, Pediatric Research, 2023. **[Impact Factor: 3.75]**

3. Junhui Zhang, Jitao Sun, and Chengcui Zhang, "Stochastic Game in Linear Quadratic Gaussian Control for Wireless Networked Control Systems under DoS Attacks," in IEEE Transactions on Systems, Man, and Cybernetics: Systems, vol. 52, no. 2, pp. 902-910, Feb. 2022, doi: 10.1109/TSMC.2020.3010515. **[Impact Factor: 9.309]**

4. Yifan Zhang, Chengcui Zhang, and Brandon Bogard, "Development of Natural Language Processing Algorithm for Dental Charting," SN COMPUT. SCI. 2, 309 (2021). https://doi.org/10.1007/s42979-021-00673-x.

5. Sandeep Bodduluri, Arie Nakhmani, Joseph Reinhardt, Carla Wilson, Merry-Lynn McDonald, Ramaraju Rudraraju, Byron Jaeger, Nirav Bhakta, Peter Castaldi, Frank Sciurba, Chengcui Zhang, Purushotham Bangalore, and Surya Bhatt, "Deep Neural Network Analyses of Spirometry for Structural Phenotyping of Chronic Obstructive Pulmonary Disease," JCI Insight, 5(13), 2020. **[Impact Factor: 6.014]**

6. Guan-Ming Su, Chengcui Zhang, Haohong Wang, Min Chen, Mohan Kankanhalli, and Rainer Lienhart, "Pushing the Boundary of Multimedia Big Data: An Overview of IEEE MIPR," IEEE Multimedia, April-June, 2019, pp. 87-91. **[Impact Factor: 4.962]**

7. Zhan Bu, Hui-Jia Li, Chengcui Zhang, Jie Cao, Anhua Li, and Yong Shi, "Graph K-means based on Leader Identification, Dynamic Game and Opinion Dynamics," , IEEE Transactions on Knowledge and Data Engineering (TKDE), Vol. 32, Issue 7, July 2020, pp. 1348-1361. **[Impact Factor: 3.857]**

8. Jingwei Qu, Xiaoqing Lu, Chengcui Zhang, Penghui Sun, Xin Li, Bei Wang, and Zhi Tang, "A Retrieval System of Medicine Molecules Based on Graph Similarity," IEEE Multimedia, 26(4), 2019, pp. 17-27. **[Impact Factor: 4.962]**

9. Xinpeng L. Liao, Chengcui Zhang, Ming Dong, and Xin Chen, "Person Reidentification by Deep Structured Prediction - A Fully Parameterized Approach," IEEE Multimedia, 26(3), July-Sept., 2019, pp. 42-55. **[Impact Factor: 4.962]**

10. Olivia Affuso, Ligaj Pradhan, Chengcui Zhang; Song Gao, Howard W Wiener, Barbara Gower, Steven B Heymsfield, and David B Allison, "A Method for Measuring Human Body Composition Using Digital Images," PLOS ONE, November, 2018. [**Impact Factor: 2.766**]

11. Young-Sik Jeong, Chengcui Zhang, and Weijia Jia, "Editorial Note: Human Centric Interactive Technologies for Multimedia Devices," *Multimedia Tools and Applications*, 77(22), November, 2018. [**Impact factor: 2.101**]

12. Da Yan, Yuzhen Huang, Miao Liu, Hongzhi Chen, James Cheng, Huanhuan Wu, and Chengcui Zhang, "GraphD: Distributed Vertex-Centric Graph Processing Beyond the Memory Limit," IEEE Transactions on Parallel and Distributed Systems, 29(1), Jan. 2018, pp. 99-114. [**Impact Factor: 4.181**]

13. Song Gao, Manar Mohamed, Nitesh Saxena, and Chengcui Zhang, "Emerging-Image Motion CAPTCHAs: Vulnerabilities of Existing Designs, and Countermeasures," IEEE Transactions on Dependable and Secure Computing, June, 2017. [**Impact Factor: 4.41**]

14. Chengcui Zhang and Lei Yang, "IEEE ISM 2016 Special Issue II: Guest Editor's Introduction," *International Journal on Semantic Computing*, 11(2), June 2017.

15. Manar Mohamed, Song Gao, Niharika Sachdeva, Nitesh Saxena, Chengcui Zhang, Ponnurangam Kumaraguru, and Paul C. Van Oorschot, "On the Security and Usability of Dynamic Cognitive Game CAPTCHAs," Journal of Computer Security, 2017.

16. Shervin Shirmohammadi and Chengcui Zhang, "The Latest Multimedia Research from IEEE ISM 2016," IEEE Multimedia Magazine, 24(2), 2017. **[Impact factor: 1.361]**

17. Xinpeng Liao and Chengcui Zhang, "Toward Situation Awareness: A Survey on Adaptive Learning for Model-Free Tracking," *Multimedia Tools and Applications*, October 2016, DOI: 10.1007/s11042-016-4001-2. **[Impact Factor: 2.101]**

18. Ligaj Pradhan, Chengcui Zhang, Steven Bethard, "Extracting Hierarchy of Coherent User-Concerns to Discover Intricate User Behavior from User Reviews," *International Journal on Multimedia Data Engineering and Management,* 7(4), 63-80, 2016.

19. Neil Y. Yen, Chengcui Zhang, Agustinus Borgy Waluyo, and James J. Park, "Social Media Services and Technologies Towards Web 3.0," *Multimedia Tools and Applications*, 07/2015; 74(14). DOI:10.1007/s11042-015-2461-4. **[Impact Factor: 2.101]**

20. Xinpeng L. Liao, Pradip Chitrakar, Chengcui Zhang, and Gary Warner, "Object-of-Interest Retrieval in Social Media Image Databases for e-Crime Forum Detection," *International Journal of Multimedia Data Engineering & Management,* 6(3), 2015.

21. Jianhua Yan, Keqi Zhang, Chengcui Zhang, Shu-Ching Chen, and Giri Narasimhan, "Automatic Construction of 3D Building Model From Airborne LIDAR Data Through 2D Snake Algorithm," *IEEE Transactions on Geoscience and Remote Sensing*, 53(1), pp. 3-14, January, 2015. **[Impact factor: 5.63]**

22. Chengcui Zhang, Elisa Bertino, Bhavani Thuraisingham, and James Joshi, "Information Reuse, Integration, and Reusable Systems," *Information Systems Frontiers*, 2014. **[Impact factor: 1.077]**

23. Chengcui Zhang, "A Survey of Visual Traffic Surveillance Using Spatio-Temporal Analysis and Mining," *International Journal of Multimedia Data Engineering & Management*, 4(3), 42-60, July-September, 2013.

24. Wei-Bang Chen and Chengcui Zhang, "An Innovative Multiple-Object Image Retrieval Framework Using Hierarchical Region Tree," *International Journal of Multimedia Data Engineering & Management*, 4(3), 1-23, July-September, 2013.

25. Zhan Bu, Chengcui Zhang, Zhengyou Xia and Jiandong Wang, "Discovering the latent communities in online channels with the similar-view network model and the fast parallel modularity optimization algorithm," *Knowledge-Based Systems*, vol. 50, pp. 246-259, September, 2013. **[Impact factor: 4.529]**

26. Zhan Bu, Chengcui Zhang, Zhengyou Xia, and Jiandong Wang, "A Fast Parallel Modularity Optimization Algorithm (FPMQA) for Community Detection in Online Social Network," *Knowledge-Based Systems*, vol. 50, September 2013, pp. 246-259. **[Impact factor: 2.422]**

27. Zhan Bu, Chengcui Zhang, Zhengyou Xia and Jiandong Wang, "An FAR-SW based Approach for Webpage Information Extraction", *Information Systems Frontiers, SI: Information Reuse, Integration, and Reusable Systems*, February 2013, pp. 1-15. **[Impact factor: 1.077]**

28. Zhan Bu, Zhengyou Xia, Jiandong Wang and Chengcui Zhang, "A Last updating evolution model for online social networks", *Physica A: Statistical Mechanics and its Applications*, Volume 392, Issue 9, 1 May 2013, Pages 2240–2247, May 2013. **[Impact factor: 1.373]**

29. Song Gao, Chengcui Zhang, and Wei-Bang Chen, "Color Image Segmentation: From the View of Projective Clustering," *International Journal of Multimedia Data Engineering & Management*, pp. 66-82, Volume 3, Issue 3, 2012.

30. Chengcui Zhang, "Multimedia Semantics, Indexing, and Applications," *International Journal of Semantic Computing*, pp. 131-134, Volume: 06, Number: 02 (June 2012). **[Impact Factor: 1.8]**

31. Chengcui Zhang, "Ubiquitous Multimedia Engineering: The Interplay of Multiple Disciplines," *International Journal of Multimedia Data Engineering and Management*, pp. i-iii, 3(2), April-June, 2012.

32. Lin Yang, Wei-Bang Chen, Chengcui Zhang, John Johnstone, Gary Warner, and Song Gao, "Profiling Online Auction Sellers by Image Editing Styles," *IEEE Multimedia*, pp. 29-39, Vol. 19, Issue 1, Jan. 2012. **[Impact Factor: 2.258]**

33. Min Chen, Hongli Luo, and Chengcui Zhang, "Multimedia Semantic Computing," *International Journal of Multimedia Data Engineering & Management*, pp. 1-4, Vol. 2, Issue 2, 2011.

34. Liping Zhou, Wei-Bang Chen, and Chengcui Zhang, "Authorship Detection and Encoding for Images," *International Journal of Multimedia Data Engineering & Management*, pp. 22-37, Vol. 2, Issue 1, 2011.

35. Chengcui Zhang, Liping Zhou, Wen Wan, Jeffrey Birch, and Wei-Bang Chen, "An Image Clustering and Feedback-based Retrieval Framework," *International Journal of Multimedia Data Engineering & Management*, pp. 55-74, Vol. 1, Issue 1, 2010.

36. Lin Yang, John Johnstone, and Chengcui Zhang, "Ranking canonical views for tourist attractions," *International Journal of Multimedia Tools and Applications*, pp. 573-589, Vol. 46, No. 2-3/January, 2010. **[Impact Factor: 2.101]**

37. Chengcui Zhang, Wei-Bang Chen, Xin Chen, Lin Yang, and John Johnstone, "A Multiple Instance Learning and Relevance Feedback Framework for Retrieving Abnormal Incidents in Surveillance Videos," *Journal of Multimedia*, vol. 5, no. 4, pp. 310-321, August, 2010. **[Impact Factor: 0.8]**

38. Wei-Bang Chen and Chengcui Zhang, "A Hybrid Framework for Protein Sequences Clustering and Classification Using Signature Motif Information," *Journal of Integrated Computer-Aided Engineering*, Volume 16 Issue 4, pp. 353-365, December 2009. **[Impact Factor: 4.667]**

39. Chengcui Zhang and Xin Chen, "Semantic Retrieval of Events from Indoor Surveillance Video Databases," *Pattern Recognition Letters*, Vol.30, Issue 12, September 2009, pp. 1067-1076. **[Impact Factor: 2.810]**

40. Chengcui Zhang, Wei-Bang Chen, Xin Chen, Richa Tiwari, Lin Yang, and Gary Warner, "A Multimodal Data Mining Framework for Revealing Common Sources of Spam Images," *Journal of Multimedia*, Vol. 4, No. 5, October 2009, p. 313-320. **[Impact Factor: 0.8]**

41. Ying Liu, Xin Chen, Chengcui Zhang, and Alan Sprague, "Semantic Clustering for Region-based Image Retrieval," *Journal of Visual Communication and Image Representation*, vol. 20, no. 2, pp. 157-166, Feb. 2009. **[Impact Factor: 1.394]**

42. William I. Grosky, Chengcui Zhang, and Shu-Ching Chen, "Intelligent and Pervasive Multimedia Systems: Guest Editor's Introduction," *IEEE Multimedia*, vol. 16 no. 1, pp. 14-15, Jan.-Mar., 2009. **[Impact Factor: 2.258]**

43. Wei-Bang Chen and Chengcui Zhang, "An Automated Bacterial Colony Counting and Classification System," *Information Systems Frontiers*, vol. 11**,** issue 4, pp. 349-368, 2009. [**Impact Factor: 1.596**]

44. Chengcui Zhang, Xin Chen, Wei-Bang Chen, and Lin Yang, "Spam Image Clustering for Identifying Common Sources of Unsolicited Emails," *International Journal of Digital Crime and Forensics*, Vol. 1, Issue 3, pp. 1-20, 2009. **[Impact factor: 0.38]**

45. Xin Chen, Chengcui Zhang, Shu-Ching Chen, and Stuart H. Rubin, "A Human-Centered Multiple Instance Learning Framework for Semantic Video Retrieval," *IEEE Transactions on Systems, Man, and Cybernetics: Part C*, vol. 39, issue 2, pp. 228-233, 2009. [**Impact Factor: 2.171**]

46. Chengcui Zhang, Wei-Bang Chen, Lin Yang, Xin Chen, and John Johnstone, "Automatic in vivo Microscopy Video Mining for Leukocytes," *SIGKDD Explorations*, Volume 9, Issue 1, pp. 30-37, June 2007. [**Impact factor: 0.58**]

47. Xin Chen, Chengcui Zhang, Shu-Ching Chen, and Min Chen, "LMS -- A Long Term Knowledge-Based Multimedia Retrieval System for Region-Based Image Databases," *International Journal of Applied Systemic Studies (IJASS)*, vol. 1, No. 4, pp. 416-435, 2007.

48. Chengcui Zhang and Xin Chen, "OCRS: An Interactive Object-based Image Clustering and Retrieval System," *Journal of Multimedia Tools and Applications, Special Issue on Multimedia Data Mining*, Volume 35, Number 1, pp. 71-89, October 2007. [**Impact factor: 2.101**]

49. Shu-Ching Chen, Stuart H. Rubin, Mei-Ling Shyu, and Chengcui Zhang, "A Dynamic User Concept Pattern Learning Framework for Content-Based Image Retrieval," *IEEE Transactions on Systems, Man, and Cybernetics: Part C*, Volume 36, Issue 6, pp. 772-783, November 2006. [**Impact Factor: 2.171**]

50. Mei-Ling Shyu, Shu-Ching Chen, Min Chen, Chengcui Zhang, and Kanoksri Sarinnapakorn, "Capturing High-Level Image Concepts via Affinity Relationships in Image Database Retrieval," *Journal of Multimedia Tools and Applications*, Volume 32, Number 1, pp. 73-92, January 2007. [**Impact factor: 2.101**]

51. Shu-Ching Chen, Mei-Ling Shyu, Chengcui Zhang, and Min Chen, "A Multimodal Data Mining Framework for Soccer Goal Detection based on Decision Tree Logic," *International Journal of Computer Applications in Technology, Special Issue on Data Mining Applications*, Vol. 27, No. 4, pp. 312-323, 2006. [**Impact factor: 1.38**]

52. Mei-Ling Shyu, Shu-Ching Chen, Min Chen, Chengcui Zhang, and Chi-Min Shu, "Probabilistic Semantic Network-based Image Retrieval Using MMM and Relevance Feedback," *Journal of Multimedia Tools and Applications*, Volume 30, Number 2, pp. 131-147, August 2006. [**Impact factor: 2.101**]

53. Shu-Ching Chen, Chengcui Zhang, et al., "A Web-Based Distributed System for Hurricane Occurrence Simulation," *Software: Practice and Experience*, Volume 34, Issue 6, pp. 549-571, May 2004. [**Impact factor: 0.713**]

54. Shu-Ching Chen, Mei-Ling Shyu, Srinivas Peeta, Chengcui Zhang, "Learning-Based Spatio-Temporal Vehicle Tracking and Indexing for Transportation Multimedia Database Systems," *IEEE Transactions on Intelligent Transportation Systems*, vol. 4, No. 3, pp. 154-167, September, 2003. [**Impact Factor: 5.744**]

55. Shu-Ching Chen, Mei-Ling Shyu, Srinivas Peeta, Chengcui Zhang, "Spatio-Temporal Vehicle Tracking Using Unsupervised Learning-Based Segmentation and Object Tracking," *IEEE Robotics and Automation Magazine, special issue on Robotic Technologies applied to Intelligent Transportation Systems*, Vol. 12, No. 1, pp. 50-58, March 2005, ISSN 1070-9932. (**Alabama IEEE "Best Paper of 2005 and 2006" Award – 1st place**) [**Impact Factor: 4.25**]

56. Keqi Zhang, Shu-Ching Chen, Dean Whitman, Mei-Ling Shyu, Jianhua Yan, and Chengcui Zhang, "A Progressive Morphological Filter for Removing Non-Ground Measurements from Airborne LIDAR Data," *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 41, Issue 4, pp. 872-882, April 2003. [**Impact factor: 5.63**]

57. Shu-Ching Chen, Mei-Ling Shyu, Chengcui Zhang, Jeff Strickrott, "A Multimedia Data Mining Framework: Mining Information from Traffic Video Sequences," *Journal of Intelligent Information Systems, Special Issue on Multimedia Data Mining*, vol. 19, no. 1, pp. 61-77, July, 2002. [**Impact Factor: 1.075**]

58. Shu-Ching Chen, Mei-Ling Shyu, Chengcui Zhang, and R. L. Kashyap, "Identifying Overlapped Objects for Video Indexing and Modeling in Multimedia Database Systems," *International Journal on Artificial Intelligence Tools*, vol. 10, no. 4, pp. 715-734, December 2001. [**Impact Factor: 2.271**]

59. Chengcui Zhang and C.-S. Yang, "Adaptive Sub-band Decomposition Using Morphological Filters," *Chinese Journal of IMAGE AND GRAPHICS*, 2000, Vol.5, No.3, pp.191-195. [**Impact Factor: 0.616**]

60. Chengcui Zhang and C.-S. Yang, "Digital Images Compression Using Sub-band Decomposition With Morphological Filters," *Chinese Computer Application and Research Journal*, Jan., 1999. [**Impact Factor: 0.428**]


**REFEREED INTERNATIONAL CONFERENCES/SYMPOSIUM PROCEEDINGS**

1. Fei Zhao and Chengcui Zhang, "Ballot Tabulation Using Deep Learning," Proceedings of the 2023 IEEE Intl. Conf. On Information Reuse and Integration (IRI), Seattle, USA, Aug. 4-6, 2023. [**Acceptance Rate of Full Papers: 29%**]

2. Fei Zhao, Chengcui Zhang, and Sheikh Abujar, "A Multimodal Approach for Evaluating Algal Bloom Severity using Deep Learning," Proceedings of the 2023 IEEE Intl. Conf. on Multimedia and Expo (ICME).

3. Akhlaque Ahmad, Lyuheng Yuan, Da Yan, Guimu Guo, Jieyang Chen, and Chengcui Zhang, "Accelerating k-Core Decomposition by a GPU," Proceedings of the 2023 IEEE Intl. Conf. on Data Engineering (ICDE).

4. Vivek V. Shukla, AKM Fazlur Rahman, Xuejun Shen, Allison Black, Nitin Arora, C. Vivek Lal, Edward F. Bell, Arie Nakhmani, Chengcui Zhang, Namasivayam Ambalavanan, and Waldemar A. Carlo, "Association Between the COVID-19 Pandemic and Fetal/Neonatal Outcomes: An Alabama Population-based Study," Proceedings of Pediatric Academic Societies (PAS) 2022 Meeting, Denver, Colorado, April 21-25, 2022.

5. Wei-Bang Chen, Yongjin Lu, Zanyah Ailsworth, Xiaoliang Wang, and Chengcui Zhang, "Enhancing Multimodal Clustering Framework with Deep Learning to Reveal Image Spam Authorship," Proceedings of the 2021 IEEE International Conference on Information Reuse and Integration, August 10-12, 2021, held virtually. [**Acceptance Rate of Full Papers: 29%**]

6. Shixing Chen, Caojin Zhang, Ming Dong, and Chengcui Zhang, "Cross-domain Person Re-Identification with Identity-preserving Style Transfer," Proceedings of the 2021 IEEE International Conference on Multimedia Information Processing and Retrieval (MIPR), September 8-10, 2021, held virtually. [**Acceptance Rate of Full Papers: 20%**]

7. Fei Zhao and Chengcui Zhang, "Building Damage Evaluation from Satellite Imagery using Deep Learning," Proceedings of the 2020 IEEE International Conference on Information Reuse and Integration, August 11-13, 2020, held virtually. [**Acceptance Rate of Full Papers: 29%**]

8. Yifan Zhang, Chengcui Zhang, and Brandon Bogard, "Development of Natural Language Processing Algorithm for Dental Charting," Proceedings of the 2020 IEEE International Conference on Information Reuse and Integration, August 11-13, 2020, held virtually.

9. Zi Qi, Zhan Bu, Xi Xiong, Hongliang Sun, Jie Cao, and Chengcui Zhang, "A Stock Index Prediction Framework: Integrating Technical and Topological Mesoscale Indicators," Proceedings of the 2019

IEEE International Conference on Information Reuse and Integration, pp. 23-30, Los Angeles, CA, USA, July 30-August 1, 2019. [**Acceptance Rate of Full Papers: 23.1%**]

10. Huan Yang, Zhan Bu, Yuyao Wang, Xi Xiong, and Chengcui Zhang, "A non-cooperative game model for overlapping community detection in social networks," Proceedings of the 2019 IEEE International Conference on Information Reuse and Integration, pp. 299-306, Los Angeles, CA, USA, July 30-August 1, 2019. [**Acceptance Rate of Full Papers: 23.1%**]

11. Trupesh Patel, Sandeep Bodduluri, Thomas Anthony, William S. Monroe, Pravinkumar G. Kandhare, John-Paul Robinson, Arie Nakhmani, Chengcui Zhang, Surya P. Bhatt, and Purushotham V. Bangalore, "Performance Characterization of Single and Multi GPU Training of U-Net Architecture for Medical Image Segmentation Tasks," Proceedings of the 2019 Practice and Experience in Advanced Research Computing, Chicago, IL, USA, July 28-August 1, 2019. [Poster]

12. Trupesh Patel, Andrew Schatz, and Chengcui Zhang, "Classifying Basketball Players by Hall of Fame Merit," Proceedings of the 2018 ACM Mid-Southeast Conference, Catlinburg, TN, USA, November 15-16, 2018. [**Best Graduate Student Paper Award**]

13. Xinpeng L. Liao, Chengcui Zhang, Ming Dong, and Xin Chen, "Deep Structured Prediction: A New Formulation for Person Re-Identification," Proceedings of the 2018 IEEE International Conference on Multimedia Information Processing and Retrieval (MIPR), Miami, FL, USA, April 10-12, 2018. [**Acceptance Rate of Full papers: 19.5%; Nominated for Best Paper Award**]

14. Jingwei Qu, Xiaoqing Lu, Chengcui Zhang, Penghui Sun, Bei Wang, and Zhi Tang, "PharmKi: A Retrieval System of Chemical Structural Formula Based on Graph Similarity," Proceedings of the 2018 IEEE International Conference on Multimedia Information Processing and Retrieval (MIPR), Miami, FL, USA, April 10-12, 2018. **Acceptance Rate of Full papers: 19.5%**]

15. Ligaj Pradhan, Chengcui Zhang, Steven Bethard, and Xin Chen, "Embedding User Behavioral Aspects in TF-IDF like Representation," Proceedings of the 2018 IEEE International Conference on Multimedia Information Processing and Retrieval (MIPR), Miami, FL, USA, April 10-12, 2018.

16. Yuan Liao, Xiaoqing Lu, Chengcui Zhang, Yongtao Wang, and Zhi Tang, "Mutual Enhancement for Detection of Multiple Logos in Sports Videos," Proceedings of the 2017 International Conference on Computer Vision (ICCV), Venic, Italy, October 22-29, 2017. [**Acceptance Rate: 25%**]

17. Ligaj Pradhan, Chengcui Zhang, and Steve Bethard, "Infusing Latent User-Concerns from User Reviews into Collaborative Filtering," Proceedings of the 2017 IEEE International Conference on Information Integration and Reuse (IRI), August 4-6, 2017, San Diego, USA. [**Acceptance Rate: 29%**]

18. Yuan Liao, Songping Fu, Xiaoqing Lu, Chengcui Zhang, and Zhi Tang, "Deep-learning-based Object-level Contour Detection with CCG and CRF Optimization," Proceedings of the 2017 IEEE Internaitonal Conference on Multimedia and Expo (ICME), July 11-14, 2017, Hongkong [Accepted for Oral Presentation: 15%].

19. Pradip Chitrakar, Chengcui Zhang, Gary Warner, and Xinpeng Liao, "Social Media Image Retrieval using Distilled Convolutional Neural Network for Suspicious e-Crime and Terrorist Involvement Detection," Proceedings of 2016 International Symposium on Multimedia, December 11-13, 2016, San Jose, CA, USA. [Acceptance Rate: 25.4%]

20. Ligaj Pradhan, Chengcui Zhang, and Steven Bethard, "Towards Extracting Coherent User Concerns and their Hierarchical Organization from User Reviews," Proceedings of the 2106 IEEE International Conference on Information Reuse and Integration, July 28-30, 2016, Pittsburg, PA, USA. [Acceptance rate: 25.6%]

21. Ligaj Pradhan, Chengcui Zhang, and Pradip Chitrakar, "Multi-View Clustering in Collaborative Filtering based Rating Prediction," *Proceedings of the 2016 IEEE International Conference on Semantic Computing*, pp. 250-253, February 3-5, 2016, Laguna Hills, California, USA.

22. Ligaj Pradhan, Song Gao, Chengcui Zhang, Barbara Gower, Steven B. Heymsfield, David B. Allison, and Olivia Affuso, "Feature Extraction from 2D Images for Body Composition Analysis," Proceedings of the 2015 IEEE International Symposium on Multimedia, December 14-16, 2015, Miami, FL, USA. [Acceptance rate: 25.5%]

23. Song Gao, Manar Mohamed, Nitesh Saxena, and Chengcui Zhang, "Emerging Image Game CAPTCHAs for Resisting Automated and Human-Solver Relay Attacks," *Proceedings of the 2015 Annual Computer Security Applications Conference (ACSAC)*, December 7-11, Los Angeles, CA, USA. [Acceptance rate: 24.4%]

24. Xinpeng L. Liao, Chengcui Zhang, Ariel D. Smith, and Grant Savage, "A Multi-Topic Meta-Classification Scheme for Analyzing Lobbying Disclosure Data," *Proceedings of the 2015 IEEE International Conference on Information Reuse and Integration (IRI'15)*, August 13-15, 2015, San Francisco, CA, USA. [Acceptance rate of full papers: 25.8%]

25. Wei-Bang Chen, Chengcui Zhang, and Xinpeng L. Liao, "Profiling Online Sellers by Textual Clues Extracted from Product Images," *Proceedings of the 2015 IEEE International Conference on Multimedia and Expo.*, June 29-July 3, 2015, Turin, Italy.

26. Pradip Chitrakar, Xinpeng L. Liao, Chengcui Zhang, and Gary Warner, "Miming Low-Duplicate Social Media Images for e-Crime Forum Detection," *Proceedings of the 2015 IEEE International Conference on Multimedia and Expo.*, June 29-July 3, 2015, Turin, Italy.

27. Wei-Bang Chen,Yongjin Lu, Song Gao, Chengcui Zhang, James Li, Olayinka S Ogunbunmi, Ligaj Pradhan, Pallant Ramsundar, and Ben Zimmerman, "An Automated Image Analysis Framework for Thermal Barrier Coating Porosity Measurement," *Proceedings of the 2015 IEEE International Conference on Multimedia Big Data*, April 20-22, 2015, Beijing, China.

28. Ligaj Pradhan, Chengcui Zhang, Danielle K. Powell, David B. Allison, and Olivia Affuso, "A Photo-based Approach for Assessing Body Postures and Their Association with Obesity," *Proceedings of the 10th International Symposium on Body Composition*, June 11-14, 2014, Cascais, Portugal.

29. Ligaj Pradhan, Chengcui Zhang, Danielle K. Powell, David B. Allison, and Olivia Affuso, "Digital Photography for the Assessment of Human Body Composition," *Proceedings of the 10th International Symposium on Body Composition*, June 11-14, 2014, Cascais, Portugal.

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## REFEREED INTERNATIONAL WORKSHOP PROCEEDINGS

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109. Chengcui Zhang, Xin Chen, and Wei-Bang Chen, "A PCA-based Vehicle Classification Framework," *Proceedings of the IEEE International Workshop on Multimedia Databases and Data Management (MDDM), in conjunction with IEEE International Conference on Data Engineering (ICDE 2006)*, April 8, 2006, Atlanta, Georgia, USA. (Acceptance Rate: 41%)

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111. Mei-Ling Shyu, Shu-Ching Chen, Min Chen, and Chengcui Zhang, "A Unified Framework for Image Database Clustering and Content-based Retrieval," *Proceedings of the Second ACM International Workshop on Multimedia Databases (ACM MMDB 2004)*, pp. 19-27, November 13, 2004, Arlington, VA, USA.

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114. Xin Huang, Shu-Ching Chen, Mei-Ling Shyu, and Chengcui Zhang, "User Concept Pattern Discovery Using Relevance Feedback and Multiple Instance Learning for Content-Based Image Retrieval," *Proceedings of* the *Third International Workshop on Multimedia Data Mining (MDM/KDD'2002)*, in conjunction with the *8th ACM SIGKDD International Conference on Knowledge Discovery & Data Mining*, pp. 100-108, July 23, 2002, Edmonton, Alberta, Canada.

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## REFEREED POSTERS AND ABSTRACTS

1. Dudding, K.M., *Sanders, A.N., *Lewis, P., *Zhao, F., Zhang, C., Carrington, J.M. (2022, September 7-10). Leveraging Clinical Experiences to Inform Optimal Neonatal Outcomes Through Technology. Academy of Neonatal Nursing National Neonatal, Advanced Practice Conference, and Mother Baby Nurses Conferences. Palm Springs, CA, United States. https://www.academyonline.org/page/FallConference (Poster)

2. Vivek Shukla, Chengcui Zhang, Xuejun Shen, Fazlur Rahman, Allison Black, Nitin Arora, Arie Nakhmani, Waldemar Carole, and Namasivayam Ambalavanan, "Association Between the COVID-19

Pandemic and Fetal, Neonatal, and Maternal Outcomes: An Alabama Population-based Study", oral presentation, Southern Regional Meeting, New Orleans, Louisiana, Feb. 10-12, 2022.

3. Yifan Zhang, Brandon Bogard, Chengcui Zhang, Noel Childers, Janice Jackson, Kyounga Cheon, and Michelle Robinson, "*Development of Natural Language Processing Algorithm for Dental Charting,*" Proceedings of the 73rd American Academy of Pediatric Dentistry annual meeting, 2020.

4. Xinpeng Liao, Pradip Chitrakar, Chengcui Zhang, and Gary Warner, "Mining Low-Duplicate Social Media Images for Criminal Forum Detection," abstract published at 92nd annual meeting of the Alabama Academy of Science, March 2015, Livingston, AL, USA.

5. Xinpeng Liao and Chengcui Zhang, "Distributed Learning for Polytope ARTMAP in the Framework of Structural Risk Minimization," abstract published at ACM Mid-SouthEast Conference, Nov. 2014, Gatlinburg, TN, USA.

6. Chengcui Zhang, Wei-Bang Chen, Richa Tiwari, Xin Chen, and Gary Warner, "Spam Image Clustering: A Novel Approach in Revealing Common Sources of Spam," *Proceedings of the 61st Annual Meeting of American Academy of Forensic Science*, pp. 155-156, February 16-21, 2009, Denver, Colorado, USA.

7. Wei-Bang Chen and Chengcui Zhang, "A Two-Phase Hybrid Method for Biological Sequence Clustering," *Proceedings of 2006 LSS Computational Systems Bioinformatics Conference*, August 14-18, 2006, Stanford University, California, USA.

## REFEREED PRESENTATION

1. Shu-Ching Chen, Mei-Ling Shyu, Srinivas Peeta, and Chengcui Zhang, "Unsupervised Automated Learning-Based Spatio-Temporal Vehicle Tracking and Indexing for Transportation Multimedia Database Systems," *Transportation Research Board (TRB) 2002 Annual Meeting*, January 13-17, 2002, Washington DC., USA.

## TECHNICAL REPORTS

1. Manar Mohamed, Niharika Sachdeva, Michael Georgescu, Song Gao, Nitesh Saxena, Chengcui Zhang, Ponnurangam Kumaraguru, Paul C. van Oorschot, and Wei-Bang Chen, "Three-Way Dissection of a Game-CAPTCHA: Automated Attacks, Relay Attacks, and Usability," arXiv:1310.1540 [cs.CR], 2013.

2. "Video Shot Change Detection for Multimedia Database Systems," Shu-Ching Chen and Chengcui Zhang, Technical Report No. 2001-11, School of Computer Science, Florida International University, November, 2001.

## INVITED PROFESSIONAL TALKS AND PRESENTATIONS

1. Panelist: IEEE IRI 2019 Panel on "On Expanding the Impact of Data Science on the Theory of Intelligence and Its Applications", July 30, 2019.

2. "A Deep Structural Learning Framework for Person Re-Identification," invited talk at University of Tennessee at Chattanooga, April, 2019.

3. "Playful and Secure Video Captchas," invited talk at Wayne State University, September, 2017.

4. "Multimedia Intelligence in Forensics and Security," invited talk at Department of Computer Sciences, The University of Alabama, September 7, 2012.

5. "Multimedia Data Mining and its Applications in Biomedical Research," invited talk at Department of Biomedical Engineering, UAB, February, 2008.

6. "Data Mining: Biomedical Applications," invited talk at XinJiang Technical Institute of Physics & Chemistry Chinese Academy of Sciences, Urumqi, XinJiang, China, June, 2007.

7. "Data Mining: Biomedical Applications," invited talk at ShiHeZi University, ShiHeZi, XinJiang, China, June, 2007.

8. "Transportation Surveillance Video Databases," invited talk at University of Alabama at Tuscaloosa, 2005.

9. "An Interactive Semantic Video Mining and Retrieval Platform – Application in Transportation Surveillance Videos for Incident Detection," invited talk at Florida International University, December, 2006.

## GRANTS

1. Ragib Hasan (PI), Chengcui Zhang (Co-PI), and Yuliang Zheng (Co-PI), NSF DGE-2234868, "CyberCorps Scholarship for Service (Renewal): Cybersecurity meets Artificial Intelligence for preparing the Next Generation of Cybersecurity Professionals," $4,615,787, 08/01/2023-07/31/2028.

2. Ragib Hasan (PI), Yuliang Zheng (Co-PI), and Chengcui Zhang (Co-PI), "UAB BridgeToCyber: Bridge Program to the Master's Degree in Cyber Security at the University of Alabama at Birmingham," supplemental grant to NSF SFS Renewal 2234868, $313,430, 08/2023-08/2025.

3. Chengcui Zhang (PI), Nitesh Saxena (PI), Dan Wallach (PI), NSF CNS-2154507, "Collaborative Research: SaTC: CORE: Medium: Bubble Aid: Assistive AI to Improve the Robustness and Security of Reading Hand-Marked Ballots," $1,200,000, 10/01/2022-09/30/2026.

4. Yuliang Zheng (PI), Chengcui Zhang (Co-PI since 2021), Ragib Hasan (Co-PI since 2021), Jeffery T. Walker (Co-PI), NSF DGE-1662762, "Justice Science Meets Computer Science: Preparing an SFS Workforce Ready to Face Cyber-Crime Challenges," $2,694,928, 01/01/2017-08/31/2023.

5. Redden, David T (PI), Chengcui Zhang (Co-PI), et. al., NIH/NIAMS, "Building and InnovatinG: Digital heAlth Technology and Analytics (BIGDATA) Methodologic Core," $1,289,478, 09/15/2020 – 08/31/2024.

6. Katherine Dudding (PI), Jacqueline Moss (Co-PI), Chengcui Zhang (Co-PI), Jane Carrington (Co-PI), Clayton Morrison (Co-PI), Dean's Scholar Award (School of Nursing, UAB), "Improving Patient to Nurse Communication Through Early Detection of Pain in the Neonate," $20,000, 11/2019-11/2020.

7. Surya Bhatt (PI), Chengcui Zhang (Senior Personnel), NIH 1R21EB027891-01, Deep Learning and Fluid Dynamics Based Phenotyping of Expiratory Central Airway Collapse, $599,205, 9/1/2019-8/31/2022.

8. Zhan Bu (PI), Chengcui Zhang (Co-PI), and Lu Zhang (Co-PI), China Natural Science Foundation, "Study on Online Public Mood Detection and Evolution Analysis Algorithms for the Financial Market Forecasting," Jan. 2016-Dec. 2018, RMB210,000.

9. Nitesh Saxena (PI) and Chengcui Zhang (Co-PI, **equal share** with the PI), Comcast, "Secure and Usable Game CAPTCHAs," Aug. 2014-Aug. 2015, $75,000.

10. Olivia Affuso (PI), Chengcui Zhang (Co-I, **Share: $600,000**), and David Allison (Co-I), NIH RO1 4R01HL107916-05, "A Photographic Method for Human Body Composition Assessment," 6/01/2012 – 4/30/2017, $2,388,439.

11. Anthony Skjellum (PI), Chengcui Zhang (Co-PI), Ragib Hasan (Co-PI), and Purushotham Bangalore (Co-PI), NSF MRI-1229282, "MRI: Development of a GPU-Enabled, Petascale Active Storage Architecture for Data-Intensive Applications in HPC and Cloud Environments," Oct. 1, 2012 – Sep. 30, 2015, $300,000.

12. Grant Savage (PI), Chengcui Zhang (Co-PI, **Share: $298,552**), David Lowery (Co-PI), NSF IOS-1127911, "Using Computer and Information Sciences to Understand Organizational Engagement," Aug. 15 2011 – Apr. 30, 2015, $485,920.00.

13. Chengcui Zhang (PI), Gary Warner (Co-PI), "Development of Multi-Dimensional Analysis Techniques for eBay Fraud Detection," eBay Inc., June 30th 2010 – June 30th, 2011, $63,058.

14. Kent Kerley (PI), Gary Warner, Chengcui Zhang, and Purushotham Bangalore, NSF REU SMA-1004953, "REU Site: Using the Social Sciences, Natural Sciences, and Mathematics to Study Crime," June 1, 2010 - May 31, 2013, $333,816.

15. Chengcui Zhang (PI), NSF DBI-0649894, "imArray-An Automated High-Performance Microarray Scanner Software Package for Microarray Image Analysis, Data Management, and Knowledge Mining," September 2007 – August 2010, $250,748.

16. Chengcui Zhang (PI), IBM UIMA Award, "imArray – An Integrated Data Management and Data Mining System for Microarray Data Analysis," August 2006 – August 2007, $19,000.

17. Chengcui Zhang (PI), UAB ADVANCE junior faculty research award, "Automated Bacterial Colony Counting," sponsored by the National Science Foundation (award SBE-0245090), $20,000, 2008-2009.

18. Chengcui Zhang (PI), UAB ADVANCE junior faculty research award, "Abnormal Pattern Detection Using Semantic Clustering for Indoor Surveillance Videos," sponsored by the National Science Foundation (award SBE-0245090), $22,418, 2007-2008.

19. Chengcui Zhang (PI), UAB ADVANCE junior faculty research award, "Automatic Vehicle Classification for Video-based Traffic Surveillance," sponsored by the National Science Foundation (award SBE-0245090), $10,000, 2005-2006.

20. Chengcui Zhang (PI), Faculty Development Award, "Information Mining and Management for Intelligent Transportation Systems" UAB, 2005-2006, $7240.00.

21. Chengcui Zhang (PI), SBE-0245090 and the UAB ADVANCE program of the Office for the Advancement of Women in Science and Engineering, $30,000, 2004-2006.

22. Chengcui Zhang (PI), UAB ADVANCE junior faculty research award, "Object-based Image Data Mining Using Multiple Instance Learning and Relevance Feedback," sponsored by the National Science Foundation (award SBE-0245090), $12,368, 2004-2005.

**PATENTS**
1. Provisional patent application, serial number 61/315,143, publication number: US20130261470 A1 (Google link: http://www.google.com/patents/US20130261470 )

**HONORS AND AWARDS**

| | |
|---|---|
| 2019 | Fellow of Society of Information Reuse and Integration (SIRI) |
| 2017 | UAB Professional Development Award, $500 |
| 2016 | Anthony Barnard Award, $1,500 |
| 2016 | UAB Faculty Grant for Online Course Development, $5,000 |
| 2011-2016 | IEEE IRI Service Award |
| 2010 | **IEEE MUE Outstanding Leadership Award** |
| 2010 | IEEE IRI 2010 Service Award |
| 2010 | Anthony Barnard Award, Department of Computer and Information Sciences, University of Alabama at Birmingham |
| 2008 | IEEE IRI 2008 Service Award |
| 2007 | Anthony Barnard Award, Department of Computer and Information Sciences, University of Alabama at Birmingham |
| 2007 | IEEE ISM Certificate of Service Appreciation |
| 2007 | The first and second place awards for the 2005-2006 IEEE Alabama Section Prize Paper Competition |
| 2006-2008 | Nominated for the Anita Borg Early Career Award and Microsoft Faculty Award (one per institution) |
| 2006 | Nominated for Microsoft Junior Faculty Research Award (one per institution) |
| 2003 | **The Outstanding Academic Performance Award** within the Field of Information and Technology, School of Computer Science, Florida International University (2003) |
| 2002 | **The Best Graduate Student Research Award**, School of Computer Science, Florida International University (2002) |
| 2000-2004 | **Presidential Fellowship**, Florida International University |
| 1999-2004 | Research Assistant at Dept. of Computer Science, Florida International University |
| 2002 | Student Travel Grants from *NSF/IEEE International Conference on Multimedia and Expo (ICME2002)*, $1,200. |
| 2000-2003 | Conference Funding from Graduate Student Association, Florida International University, $1250. |

**COURSE TEACHING**

> CS 665/765 – Deep Learning
> CS 663/763 – Data Mining
> CS 692/792 – Multimedia Information Retrieval
> CS 415/515/615/715 – Multimedia Databases
> CS 303 – Algorithms/Data Structures, Summer
> CS 410/510 – Database Application Development
> CS 610/710 – Advanced Topics in Database Systems
> CS 203 – Object-Oriented Programming with Java
>
> CS 697/796 - Directed Readings
> CS 618/718 – Database Seminar
>
> CS 499 – Senior Capstone (team-taught)
> CS 101 - Fluency in Information Technology (team-taught, 2007-2008)

**STUDENT ADVISING**

*Ph.D. Thesis Supervision:* Completed (**6** (**1 woman**)), Current (**3**)
*M.S. Student Advised*: 11
*High School Student Advised*: 2 (including 1 **female** student)

> **Doctoral Dissertation Advisor:**

Dr. Xin Chen (2004-2008, Assistant Professor at Government State University)
*Human-Centered Semantic Retrieval IN Multimedia Databases*

Dr. Lin Yang (2007-2011, co-advised with Dr. John Johnstone, a founding Engineer of DeepMap)
*Mining Canonical Views from Internet Image Collections*

Dr. Wei-Bang Chen (2005-2012, Associate Professor in Computer Sciences at Virginia State University)
*Multiple Object Retrieval in Image Databases Using Hierarchical Segmentation Tree*

Dr. Song Gao (2009-2014, now with Google)
*An Evolutionary Study of Dynamic Cognitive Game CAPTCHAs: Automated Attacks and Defenses*

Dr. Ligaj Pradhan (2012-2017, Data Scientist at Equifax)
*Enhancing Collaborative Filtering-based Rating-Prediction by Discovering and Incorporating User Concerns from User Reviews*

Dr. Xinpeng Liao (2013-2019, Applied Research Scientist, New York)
*Person Re-Identification by Deep Structured Prediction: A Generative Approach*

**Doctoral Dissertation Committee Chair/Member - UAB:**

Sheikh Abujar (Chair: 2022-present)
AKM Shahariar Azad Rabby (Chair: 2021-present)
Pratim Saha (Chair: 2021-present)
Fei Zhao (Chair: 2019-present)
Sundar Tamang (2019-present)
Fatoumata, Sanogo (2020-present)
Dr. Xinpeng Liao (2019)
Dr. Jason Britt (2018)
Dr. Sagar Thapaliya (2017)
Dr. Ligaj Pradhan (2017)
Dr. Song Gao (2014)
Dr. Zekai Demirezen (2012)
Dr. Wei-Bang Chen (2012)
Dr. Qichao Liu (2012)
Dr. Yu Sun (2011)
Dr. Lin Yang (2011)
Dr. Bradley Wardman (2011)
Dr. Robert Tairas (2010)
Dr. Chun Wei (2010)
Dr. Xin Chen (2008)
Dr. Alex Liu (2007)
Dr. Ying Liu (2007)
Dr. Yonghui Chen (2006)
Dr. Yuahua Lin (2007)
Dr. Jing Zhang (2009)
Dr. Hui Wu (2007)
Pradip Chitrackar (2014-2017).

**Master Thesis Committee Member:**

Yifan Zhang (2019, School of Dentistry)
*Development of Natural Language Processing Algorithm for Dental Charting*

Shrikanth Mamidipalli (2009, Dept. of Civil Engineering at UAB)
*Developing Regional Transportation Data Center for Birmingham*

**High School Student Advising:**

Maria Deng, Afsaneh Faki

## STUDENT ACCOMPLISHMENTS

- Fei Zhao – 2023 IEEE TCMC travel grant to IEEE IRI2023 ($650)
- Shahariar Rabby – 2022 CVPR travel grant ($1,000)
- Shahariar Rabby - 2022 UAB Graduate School Dean's Scholarship ($1,500)
- Trupesh Patel and Andrew Shatz – 2018 ACM Mid-Southeast Conference Best Graduate Paper Award.
- Xinpeng Liao – IEEE MIPR'18 Student Travel Scholarship ($1,000) by NSF, best paper nomination.
- Xinpeng Liao – IEEE ICME'16 Student Travel Scholarship ($1,500).
- Xinpeng Liao - the **1st prize** at the 2015 (92th) annual meeting of The Alabama Academy of Science.
- Song Gao – College of Arts and Sciences **Dean's Award** (PhD category, 3 in the entire college), 2014
- Song Gao – Department of Computer and Information Sciences **Outstanding PhD Student Award** (one per each department), 2014
- Song Gao - **One of the only two winners** of the College of Arts and Sciences Graduate Student Entrepreneurship Awards, 2014. The award is based on Song's dissertation research on next generation CAPTCHAs.
- Ligaj Pradhan - the **1st place** in ACM Mid-Southeast Conference Student Research Competition (PH.D. Division), 2013.
- Rajan Kharel and Niju Shrestha – the 3rd place in ACM Mid-Southeast Conference Student Research Competition (MS Division), 2013.
- Rajan Kharel - the **1st place** at the 2013 (90th) annual meeting of The Alabama Academy of Science.
- Richa Tiwari - ACM-W Travel Scholarship 2011.
- Wei-Bang Chen – Travel award to attend the 2011 ACM International Conference on Multimedia (MM'11), Scottsdale, Arizona, USA.
- Richa Tiwari - Travel award to attend the 2011 ACM International Conference on Multimedia (MM'11), Scottsdale, Arizona, USA.
- Song Gao – Travel grant to attend the 2011 IEEE International Conference on Multimedia and Expo (ICME'11), Barcelona, Spain.
- Richa Tiwari - Travel grant to attend MediaEval 2011 Workshop in Pisa, Italy, one of the three grants awarded worldwide.
- Song Gao – the **1st place** in ACM Mid-Southeast Conference Student Research Competition (PH.D. Division), 2010.
- Wei-Bang Chen – 2011 ACM SAC student travel Award, $1,800.
- Richa Tiwari - Grace Hopper Scholarship
- Liping Zhou (**female**) – the **2nd prize** at the 2010 UAB Graduate Research Days.
- Richa Tiwari (**female**) – the **1st place** in ACM Mid-Southeast Conference Student Research Competition (PH.D. Division), 2009.
- Richa Tiwari (**female**) – the **2nd prize** at the 2009 (86th) annual meeting of The Alabama Academy of Science.
- Lin Yang – the **2nd prize** at the 2009 UAB Graduate Research Days.
- Lin Yang – 2009 Google Summer Research Internship
- Lin Yang – 2008 Google Summer Research Internship
- Xin Chen (**female**) – **Dean's Award** (Ph.D. category) in the School of Natural Science and Mathematics, 2008. Outstanding Graduate Student (Ph.D. category) in the Department of Computer and Information Sciences.

- Xin Chen (**female**) – nominated for the Barker Award, 2008.
- Hua Zhong – the **2$^{nd}$** place in ACM Mid-Southeast Conference Student Research Competition (Master Division), 2007.
- Lin Yang passed PhD Level I exam with **distinction**, Jan. 2008.
- Lin Yang – the **1$^{st}$** prize at the 2008 UAB Graduate Research Days.
- Aqueasha Martin (**African-American, female**) – NSF/LSAMP Bridge to the Doctorate Fellow, 2005 NSF Honorable Mention
- Xin Chen (**female**) – the **2$^{nd}$** place award for the 2005-2006 IEEE Alabama Section Prize Paper Competition.
- Xin Chen (**female**) – the **1$^{st}$** place in ACM Mid-Southeast Conference Student Research Competition (Doctoral Division), 2004.
- Xin Chen (**female**) – the **1$^{st}$** place in the Student Research Award Competition (Section X, Engineering and Computer Science) in the 82nd Annual Meeting of Alabama Academy of Science, 2005.
- Wei-Bang Chen – the **1$^{st}$** place in the Student Research Award Competition (Section X, Engineering and Computer Science) in the 83rd Annual Meeting of Alabama Academy of Science, 2006.
- Xin Chen (**female**) passed PhD Level I exam with **distinction**, Jan. 2006.
- Xin Chen (**female**) – the **2$^{nd}$** prize at the 2006 UAB Graduate Student Research Day.


**SYNERGISTIC ACTIVITIES**
*IEEE Committees:*
- **Chair**, IEEE Technical Committee on Multimedia Computing (2020-present)
- Conference Chair, IEEE Technical Committee on Multimedia Computing (2016-2019)
- **Chair**, IEEE Technical Committee on Semantic Computing (2014-2016)
- Secretary and Newsletter Editor, IEEE Technical Committee on Multimedia Computing (2012-2016)

*Community Services:*
- Fellow of Society of Information Reuse and Integration (SIRI) (elected in 2019)
- Search Committee Chair of IEEE Multimedia (2016-2017)
- Steering Committee Voting Member, IEEE International Conference on Multimedia and Expo. (ICME)
- Steering Committee Member, Society of Information Reuse and Integration (SIRI)

*Journal Editor in Chief:*
- International Journal of Multimedia Data Engineering and Management (IJMDEM) (2019- present)

*Journal Associate Editor:*
- IEEE's Transactions on Dependable and Secure Computing (2022-present)
- IEEE Transactions on Multimedia (2015-2017)
- International Journal of Multimedia Data Engineering and Management (IJMDEM) (since its inception – 2018)

*Guest Editor*:
- IEEE Multimedia, Special issue in 2019.
- Multimedia Tools and Applications (MTAP), Special issue in 2018.
- International Journal on Semantic Computing, 2017
- IEEE Multimedia, ISM'16 Special Issue, 2016
- Advances in Multimedia, Special Issue on Ubiquitous Multimedia Systems in Smart Environments, 2014
- Information Systems Frontiers, Special Issue on Information Integration and Reuse, 2013
- International Journal of Semantic Computing Special Issue on Multimedia Semantics, 2012
- International Journal of Multimedia and Data Engineering and Management Special Issue on Information Integration and Reuse, 2012
- International Journal of Multimedia and Data Engineering and Management Special Issue on Multimedia Semantic Computing, 2011

- International Journal of Multimedia Data Engineering and Management Special Issue on Semantic Multimedia Engineering and Systems, 2009
- IEEE Multimedia Magazine Special Issue on Intelligent Pervasive Multimedia Systems, 2008
- Fundamenta Informaticae Special Issue on Advances in Intelligent Computing and its Applications. Published under the auspices of the European Association for Theoretical Computer Science (EATCS), 2008

*Journal Editorial Board*:
- The Scientific World Journal (impact factor: 1.730)
- The International Journal of Multimedia
- Journal of Advances in Multimedia
- International Journal of u- and e- Service, Science and Technology
- International Journal of Computer and Informatics
- International Journal of Multimedia and Ubiquitous Engineering
- The International Journal of Principles and Applications in Information Science and Technology

*Conference General Chair:*
- 2019 IEEE International Conference on Multimedia Information Processing and Retrieval, San Jose, CA, USA.

*Program Chair*:
- 2022 ACM Multimedia Area Chair, Lisbon, Portugal.
- 2021 ACM Multimedia Area Chair, Chengdu, China.
- 2020 IEEE International Conference on Information Reuse and Integration (IRI), San Diego, USA.
- 2020 IEEE International Conference on Multimedia and Expo (ICME) Area Chair, London, UK.
- 2019 IEEE International Conference on Information Reuse and Integration (IRI), Los Angeles, USA.
- 2018 ACM Multimedia (ACM MM) Area Chair, Seoul, Korea.
- 2018 IEEE International Conference on Multimedia Information Processing and Retrieval, Miami, FL, USA, Apr. 4-6, 2018.
- 2017 IEEE International Conference on Information Reuse and Integration, San Diego, CA, USA, Aug. 4-6, 2017.
- 2016 IEEE International Symposium on Multimedia (ISM 2016), San Jose, CA, USA, Dec. 11-13, 2016
- The 6th FTRA International Conference on Information Technology Convergence and Services (ITCS 2014), Taipei, Taiwan, Oct. 16-18, 2014
- 2014 IEEE International Conference on Multimedia and Expo. (ICME 2014).
- 2013 IEEE International Conference on Information Reuse and Integration (IRI 2013).
- 2012 IEEE International Conference on Information Reuse and Integration (IRI 2012).
- 2011 IEEE International Symposium on Multimedia (ISM 2011).
- 2010 IEEE International Conference on Multimedia and Ubiquitous Engineering (MUE 2010).

*Proposal Reviewing*:
- 2019: AAAS, Panelist
- 2019: ORAU, project progress reviewer
- 2017-2018: National Science Foundation (NSF), Panelist
- 2015: National Science Foundation (NSF), Panelist
- 2015: Department of Defense (DoD)
- 2014: National Science Foundation (NSF), Panelist
- 2013: National Science Foundation (NSF), Panelist
- 2009: National Science Foundation (NSF), Panelist
- 2008: Assessment of Research Proposal for NSF
- 2008: Assessment of Research Proposal for Research Grants Council (RGC), Hong Kong

*Program vice Chair*:
- The program vice-chair on Multimedia area at the 2007 International Conference on Intelligent Pervasive Computing (IPC-07).

*Workshop Chair*:
- The 2023 ACM International Conference on Multimedia
- The 2020 IEEE International Conference on Multimedia Information Processing and Management

- The 2014 IEEE International Conference on Information Reuse and Integration
- The 2013 IEEE International Symposium on Multimedia
- The 2012 IEEE International Symposium on Multimedia
- The 2011 IEEE International Workshop on Semantic Multimedia Computing, held in conjunction with 2011 IEEE International Conference on Semantic Computing.
- The 2009 IEEE International Symposium on Multimedia.
- The 2009 International workshop on Multimedia Semantic Computing and Systems, held in conjunction with the 2009 IEEE International conference on Semantic Computing.
- The 2008 International Conference on Semantic Computing.
- The 2007 International workshop on Multimedia Semantic Computing and Systems, held in conjunction with the 2007 IEEE International conference on Semantic Computing, September 17-19, 2007, Irvine, California, USA.

*Best Paper Committee:*
- The 2022 IEEE International Conference on Information Reuse and Integration (IRI)
- The 2021 IEEE International Conference on Information Reuse and Integration (IRI)
- The 2018 IEEE International Conference on Information Reuse and Integration (IRI)

*Publicity Chair*:

- The 2014 IEEE International Conference on Semantic Computing (ICSC).
- The 2014 IEEE Symposium on Multimedia.
- The 2013 International Conference on Multimedia Ubiquitous Engineering (MUE).
- The 2013 IEEE International Conference on Semantic Computing (ICSC).
- The 2012 IEEE International Conference on Semantic Computing (ICSC).
- The 2011 IEEE International Conference on Semantic Computing (ICSC).
- The 2011 IEEE International Conference on Information Reuse and Integration (IRI).
- The 2010 IEEE Symposium on Multimedia.
- The 2010 IEEE International Conference on Information Reuse and Integration (IRI).
- The 2010 IEEE International Conference on Semantic Computing (ICSC).
- The 2009 IEEE International Conference on Semantic Computing (ICSC).
- The 2009 IEEE International Conference on Information Reuse and Integration (IRI).
- The 2008 IEEE Symposium on Multimedia.
- The 2008 IEEE International Conference on Information Reuse and Integration (IRI).
- The 2007 IEEE International Conference on Information Reuse and Integration (IRI).

*Finance and Local Arrangement Co-Chairs*
- The 2019 IEEE International Conference on Multimedia and Expo (ICME)
- The 2016 IEEE International Conference on Information Reuse and Integration (IRI)
- The 2015 IEEE International Conference on Semantic Computing (ICSC).
- The 2015 IEEE International Symposium on Multimedia (ISM).

*Demo co-Chair*:
- The 2007 IEEE International Symposium on Multimedia (ISM 2007).

*Program committee*:
- The 2019 IEEE International Conference on Multimedia and Expo (ICME)
- The 2019 IEEE International Conference on Information Reuse and Integration (IRI)
- The 2018 ACM Multimedia (ACM MM)
- The 2017 ACM Multimedia Systems Conference (MMSys)
- The 2016 IEEE International Conference on Information Reuse and Integration (IRI)
- The 2016 IEEE International Conference on Multimedia and Expo (ICME)
- The 2015 IEEE International Conference on Information Reuse and Integration (IRI).
- The 2015 IEEE International Conference on Multimedia Big Data (BigMM).
- The 2015 IEEE International Conference on Multimedia and Expo (ICME).
- The 2014 IEEE International Conference on Information Reuse and Integration (IRI).
- The 2014 IEEE International Conference on Tools with Artificial Intelligence (ICTAI).
- The 2014 International Conference on Signal Processing and Multimedia Applications (SIGMAP).

- The 2013 IEEE International Workshop on Multimedia Information Processing and Retrieval (IEEE-MIPR 2013), in conjunction with IEEE International Symposium on Multimedia (ISM).
- The 2013 International Conference on Signal Processing and Multimedia Applications (SIGMAP).
- The 2013 IEEE International Conference on Machine Learning and Applications (ICMLA).
- The 2013 IEEE International Conference on Tools with Artificial Intelligence (ICTAI).
- The 2012 ACM International Conference on Multimedia Retrieval (ICMR).
- The 2012 IEEE International Workshop on Multimedia Information Processing and Retrieval (IEEE-MIPR 2012), in conjunction with IEEE International Symposium on Multimedia (ISM).
- The 2012 International Conference on Signal Processing and Multimedia Applications (SIGMAP).
- The 2012 IEEE International Conference on Machine Learning and Applications (ICMLA).
- The 2011 FTRA International Conference on Computer Science and its Applications (CSA).
- The 2011 International Conference on Signal Processing and Multimedia Applications (SIGMAP).
- The 2011 IEEE International Conference on Information Reuse and Integration (IRI).
- The 2011 IEEE International Conference on Tools with Artificial Intelligence (ICTAI).
- The 2011 IEEE International Workshop on Multimedia Information Processing and Retrieval (IEEE-MIPR 2011), in conjunction with IEEE International Symposium on Multimedia (ISM2011).
- The 2011 IEEE International Conference on Machine Learning and Applications (ICMLA).
- The 2011 ACM International Conference on Multimedia Retrieval (ICMR).
- International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management (KDIR2010), October 25-28, 2010, Valencia, Spain.
- The Second International Symposium on Data, Privacy, & E-Commerce (ISDPE 2010), September 13-14, Buffalo/Niagara Falls, USA.
- The 2010 IEEE International Conference on Information Reuse and Integration (IRI2010), August 4-6, 2010, Las Vegas, NV, USA.
- The 4th International Workshop on Intelligent, Mobile and Internet Services in Ubiquitous Computing (IMIS 2010), in conjunction with CISIS 2010, February 15-18, 2010, Krakow, Poland.
- ACM International Conference on Image and Video Retrieval (CIVR2010), July 5-7, Xi'An, China.
- IEEE International Symposium on Multimedia (ISM2010), December 13-15, 2010, Taiwan.
- The 2010 IEEE International Workshop on Multimedia Information Processing and Retrieval (IEEE-MIPR 2010), in conjunction with IEEE International Symposium on Multimedia (ISM2010).
- The 2010 IEEE International Conference on Machine Learning and Applications (ICMLA 2010), December 12-14, 2010, Washington DC, USA.
- The 2010 International Conference on Multimedia, Computer Graphics and Broadcasting (MulGraB 2010), December 8-10, 2010, Jeju Island, Korea.
- The 2009 IEEE International Conference on Machine Learning and Applications (ICMLA 2009)
- The 2009 International Workshop on Power-Aware Pervasive Devices (PerDev 2009)
- The 2009 IEEE International Conference on Multimedia Ubiquitous Engineering (MUE 2009)
- The 2009 International Workshop on Intelligent, Mobile and Internet Service in Ubiquitous Computing (IMIS 2009), in conjunction with the 2009 International Conference on Complex, Intelligent and Software Intensive Systems (CCISIS 2009), Fukuoka, Japan.
- The 2009 International Computer Science and Technology Conference, San Diego, CA, USA.
- The 2009 IEEE International Conference on Multimedia and Expo (ICME 2009)
- The 2009 IEEE International Workshop on Multimedia Information Processing and Retrieval (IEEE-MIPR 2009), in conjunction with IEEE International Symposium on Multimedia (ISM2009)
- The 2008 IEEE International Symposium on Multimedia, December 15-17, Berkeley, CA, USA.
- The 2008 IEEE International Conference on Machine Learning and Applications, December 11-13, San Diego, CA, USA
- 2008 International Conference on Advanced Software Engineering & Its Applications (ASEA 2008), Hainan Island, Dec. 13-15, China.
- The 2008 International Symposium on u- and e- Service, Science and Technology (UNESST), Dec. 13-15, Hainan Island, China.
- The 2008 ACIS/IEEE International Conference on Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing (SNPD 2008), August 6-8, Phuket, Thailand.
- The 2008 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2008), October 12-15, Singapore.
- The 2008 IEEE International Conference on Multimedia and Ubiquitous Engineering (MUE 2008), April 24-26, Busan, Korea.

- The 2008 IEEE International Conference on Information Security and Assurance (ISA 2008), April 24-26, Busan, Korea.
- The 2008 International Workshop on Interactive Multimedia & Intelligent Services in Mobile and Ubiquitous Computing (IMIS 2008), in conjunction with the 2008 IEEE International Conference on Multimedia and Ubiquitous Engineering, April 24-26, Busan, Korea.
- The 2008 IEEE International Conference on Multimedia and Expo (ICME 2008), June 23-26, Hannover, Germany.
- The 2008 IEEE/ACIS International Conference on Computer and Information Science, May 14-16, Portland, Oregon, USA.
- The 12th World Multi-Conference on Systemics, Cybernetics and Informatics: WMSCI 2008, June 29-July 2, Orlando, Florida, USA.
- The 2007 IEEE International Conference on Multimedia and Ubiquitous Engineering (MUE2007), April 26-28, Seoul, Korea.
- The 2007 International Workshop on Parallel and Distributed Multimedia Computing (ParDMCom 2007), in conjunction with International Symposium on Parallel and Distributed Processing and Application (ISPA 2007), Niagara Falls, Ontario, Canada, August 28 - September 1, 2007.
- The 2007 International Symposium on Smart Home, December 7-8, Jeju-Island, Korea.
- The 2007 IEEE International Workshop on Multimedia Information Processing and Retrieval, in conjunction with 2007 IEEE International Symposium on Multimedia, December 10-12, Taichung, Taiwan.
- The 2007 Information Resources Management Association International Conference (IRMA 2007), May 19-23, Vancouver, British Columbia, Canada.
- The 2007 International Symposium on Data, Privacy, and E-Commerce (ISDPE 2007), November 1-3, 2007, Chengdu, SiChuan, China.
- The 2007 International Conference on Information Management in the Networked Economy (IBIMA 2007), June 20-22, Dublin, Ireland.
- The 2007 IEEE International Conference on Machine Learning and Applications (ICMLA 2007), December 13-15, Cincinnati, Ohio, USA.
- The 2007 IEEE International Conference on Networking, Sensing and Control (ICNSC 2007), April 15-17, London, United Kingdom.
- The 2007 IEEE International Conference on Semantic Computing (ICSC 2007), September 17-19, 2007, Irvine, California, USA.
- The 2007 International Conference on Intelligent Pervasive Computing (IPC 2007), October 11-13, 2007, Jeju Island, Korea.
- The 2007 IEEE International Conference on Multimedia and Expo, July 2-5, BeiJing, China, 2007.
- The 8th International Conference on Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing (SNPD 2007), Qingdao (also known as Tsingtao), China, July 30 - August 1, 2007.
- The 2007 ACM SIGMM International Multimedia Modeling Conference, Singapore, January 9-12, 2007.
- The 2007 Military Communications Conference, October 29-31, Orlando, Florida, USA.
- The 2006 International Workshop on Parallel and Distributed Multimedia Computing (ParDMCom-06), December 1-4, 2006, Sorrento, Italy.
- The 2006-2007 IEEE International Workshop on Multimedia Databases and Data Management (MDDM'06) in conjunction with IEEE International Conference on Data Engineering (ICDE).
- The 2005-2008 IEEE International Workshop on Multimedia Information Processing and Retrieval, in conjunction with IEEE International Symposium on Multimedia (ISM).
- The 2005-2008 IEEE International Conference on Information Reuse and Integration (IRI).
- The IEEE International Workshop on Multimedia Technology and Ubiquitous Computing (MTUC 2006), in conjunction with The IEEE International Conference on Sensor Networks, Ubiquitous, and Trustworthy Computing (SUTC 2006), Taichung, Taiwan, June 5-7, 2006.
- The 2006 IEEE International Conference on Networking, Sensing and Control (ICNSC), Ft. Lauderdale, Florida, U.S.A. April 23-25, 2006.
- The 2005-2006 IEEE International Workshop on Multimedia Information Processing and Retrieval, in conjunction with IEEE International Symposium on Multimedia (ISM).
- The First International Conference on Embedded Software and Systems (ICESS'04), December 9-10, 2004, Hangzhou, PRC.

*Session chair*:

*The 2019 IEEE Intl. Conf. on Information Reuse and Integration; The 2014 IEEE International Conference on Multimedia and Expo; The 2006 IEEE International Workshop on Multimedia Databases and Data Management (MDDM'06) in conjunction with IEEE International Conference on Data Engineering (ICDE 2006)* in Atlanta, Georgia, USA on April 2006; *the 2005 IEEE International Workshop on Multimedia Information Processing and Retrieval*, in conjunction with IEEE International Symposium on Multimedia, (ISM 2005), December 12-14, 2005, Irvine, California, USA.; t*he Second ACM International Workshop on Multimedia Databases (ACM MMDB'04),* November 12, 2004, Hyatt Arlington Hotel, Arlington, VA, USA.

*Frequent Journal Reviewer for:*

- IEEE Access
- IEEE Transactions on Multimedia
- IEEE Transactions on Knowledge and Data Engineering
- PLOS ONE
- IEEE Transactions on Image Processing
- Pattern Recognition Letters
- IEEE Transactions on Emerging Topics in Computing
- IEEE Transactions on Human-Machine Interfaces
- IEEE Transactions on Intelligent Transportation Systems
- IET Image Processing
- International Journal of Knowledge and Information Systems
- International Jounal of Expert Systems with Applications
- Journal of Biomedical and Health Informatics
- International Journal of Cluster Computing
- Journal of Intelligent and Fuzzy Systems
- Knowledge and Information Systems;
- Integrated Computer Aided Engineering
- Journal of Neural Systems
- Journal of Intelligent and Fuzzy Systems
- International Journal of Pattern Recognition and Artificial Intelligence
- International Journal on Multimedia Ubiquitous Computing
- Data & Knowledge Engineering
- Journal of Visual Communication and Image Representation
- IEEE Transactions on Systems, Man, and Cybernetics, Part C
- Information Sciences
- Journal of Medical Systems
- Computer Methods and Programs in Biomedicine
- Journal of Neurocomputing
- International Journal of Information Technology & Decision Making
- Multimedia Tools and Applications
- The Journal of Multimedia
- International Journal of Semantic Computing
- IEEE Multimedia Magazine
- ACM Multimedia Systems Journal
- IEEE Transactions on Neural Networks
- EURASIP Journal on Applied Signal Processing

**DEPARTMENTAL SERVICE**

- UAB Grievance & Termination Hearing Panel (2020-present)
- FAC Chair of CS (2022-present)
- Chair of CS teaching assistant faculty search committee (2021-2023)
- Chair of CS director of Cyber Security Center search committee (2021-2022)
- Chair of CS teneure track faculty search committee (2020-2022)
- Chair of CS Faculty Affair Committee (2021-present)

- Serving on the CS tenure track faculty search committee (2018-2020)
- Serving on the CS teaching faculty search committee (2018)
- Developed a new MS program in Data Science (2016-2018)
- Developed a new MS certificate in Cybersecurity
- Serving as the Diversity Representative (2016-present)
- Serving as the faculty sponsor of CIS ACM-W student chapter (2016-present)
- Serving on the teaching faculty search committee in 2016
- Serving on the faculty search committee in 2016-2017
- Serving on CIS chair search Committee in 2014- 2015
- Serving as the Graduate Program Director since Aug. 2014
- Serving as a mentor for a CIS junior faculty member since 2014
- Serving on the CIS strategic planning committee since 2013
- Serving on the Faculty Search Committee in 2009
- Serving on the Faculty Search Committee in 2008
- Serving as a Weave Liaison at CIS Dept. since Fall 2008
- Serving on the undergraduate curriculum committee in CIS since Spring 2007
- Serving on the graduate admission committee in CIS since Fall 2007
- Organized the CIS Department's representation at the UAB Regional Science & Engineering Fair, 2007
- Helped to coordinate the CIS Department Summer Computer Programming Contest in 2006-2009
- Served as a judge for the 2007 Alice Film Festival for those in grades 8-12
- Seminar chair Fall 2006 – Aug. 2014
- Served or currently serving on 10 Ph.D. dissertation committees
- Responsible for the database section of the 2008 Ph.D. qualifying exam
- Responsible for the database section of the 2008 Ph.D. qualifying exam
- Responsible for the database section of the 2007 Ph.D. qualifying exam
- Responsible for the database section of the 2006 Ph.D. qualifying exam
- Organized the 2006 CRA-W Distinguished Lecture Series

**UNIVERSITY SERVICE**

- Serving on UAB  Academic Council for International Student Success since 2016
- Serving on Research Committee since 2015
- Serving as a faculty senate since 2014
- Serving on University Governance and Operations Committee 2014-2015
- Serving on the CAS College Graduate Scholars Program Committee since 2014
- Serving on the UAB ADVANCE advisory board
- Serving as a judge for UAB Graduate Research Day, 2006-2008
- Co-organizing the 2008 ADVANCE Summer Symposium for Female Scholars in Alabama, 2007

**OUTREACH EFFORT**
- Support a NSF REU camp for three consecutirve years since 2010.
- Organized a Java Programming Summer Camp for Middle- and High School students in 2011.
- Co-organized the 2008 ADVANCE Summer Symposium for Female Scholars in Alabama, 2008.

- Organized the 2006 CRA-W Recruitment Events and the Distinguished Lecture Series designed to attract female students to graduate school.
- Organized the CIS Department's representation at the *UAB Regional Science & Engineering Fair*, 2007.
- Co-organized the CIS Department Summer Computer Programming Contest from 2006 to 2009.
- Served as a judge for the 2007 Alice Film Festival for those in grades 8-12.