# **CHUNYU AI**

Professor

Division of Math & Computer Science University of South Carolina Upstate

Spartanburg, SC 29303

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## RESEARCH INTERESTS

• Wireless sensor networks

- Data Management
- Social Networks

### **EDUCATION**

•	Ph.D. Computer Science	August 2006 – August 2010
	Georgia State University, Atlanta, GA	
•	M.S. Computer Science	September 2001 – July 2004
	Heilongjiang University, Harbin, China	
•	B.S. Computer Software	September 1997 – July 2001

Heilongjiang University, Harbin, China

**Graduate Research Assistant** 

### **WORK EXPERIENCE**

•	Computer Science, University of South Carolina Upstate	Aug 2022 – present
	Professor	
•	Computer Science, University of South Carolina Upstate	Aug 2018 – Aug 2022
	Associate Professor	
•	Computer Science, University of South Carolina Upstate	Jan 2013 – Aug 2018
	Assistant Professor	
•	Computer Science, Troy University	Aug 2010 – Dec 2012
	Assistant Professor	
•	Department of Computer Science, Georgia State University	Aug 2006 – Aug 2010

• Department of Computer Science, Heilongjiang University, China

July 2004 – July 2006

## **PUBLICATIONS**

# JOURNAL ARTICLES:

Instructor

- 1. Wei Zhong, Ning Yu and **Chunyu Ai**, "Applying big data based deep learning system to intrusion detection", *Big Data Mining and Analytics*, 3(30), 181-195, 2020.
- 2. Ruonan Zhao, Lichen Zhang, Xiaoming Wang, **Chunyu Ai**, Fei Hao, Yaguang Lin and Lei Shi, "A novel energy-efficient probabilistic routing method for mobile opportunistic networks", *Journal on Wireless Communications and Networking*, 2018 (1), 1-15.
- 3. **Chunyu Ai**, Frank Haizhon Li and Kejia Zhang, "Detecting Isolate Safe Areas in Wireless Sensor Monitoring Systems", *Journal of Tsinghua Science and Technology*, Vol 22, Number 4, pp 427-436, Sep 24, 2017.

- Meng Han, Zhuojun Duan, Chunyu Ai, Forrest Wong Lybarger, Yingshu Li, and Anu G. Bourgeois, "Time constraint influence maximization algorithm in the age of big data", International Journal of Computational Science and Engineering, 15(3-4), 165-175, Oct 03, 2017.
- 5. **Chunyu Ai**, Wei Zhong, Mingyuan Yan, Feng Gu, "A Partner Matching Framework for Social Activity Communities", *Computational Social Networks*, Vol. 1.1, 2014.
- Chunyu Ai, Yueming Duan, Mingyuan Yan, and Jing He, "Area Query Processing Based on Gray Code in Wireless Sensor Networks", *Tsinghua Science and Technology*, Vol.17, Issue 5, 2012.
- 7. Yingshu Li, **Chunyu Ai**, Zhipeng Cai, and Raheem Beyan, "Sensor scheduling for p-percent coverage in wireless sensor networks", *Cluster Computing*, pp. 27-40, March 2011.
- 8. Yingshu Li, Chinh Vu, **Chunyu Ai**, Guantao Chen, and Yi Zhao, "Transforming Complete Coverage Algorithms to Partial Coverage Algorithms for Wireless Sensor Networks," *IEEE Transactions on Parallel and Distributed Systems*, pp. 695-703, April 2011.
- Longjiang Guo, Meirui Ren, Jinbao Li, Yong Liu, and Chunyu Ai, "H-cluster: A Novel Efficient Algorithm for Data Clustering in Sensor Networks," *Journal of Communications*, Vol 6, No 2 (2011), 168-178, Apr 2011.
- 10. Yingshu Li, **Chunyu Ai**, Chinh T. Vu, Yi Pan, and Raheem Beyah, "Delay-Bounded and Energy-Efficient Composite Event Monitoring in Heterogeneous Wireless Sensor Networks," *IEEE Transactions on Parallel and Distributed Systems*, pp. 1373-1385, September 2010.
- 11. Yingshu Li, Yiwei Wu, **Chunyu Ai**, and Raheem Beyah, "On the construction of k-connected m-dominating sets in wireless networks," *Journal of Combinatorial Optimization*, August 2010.
- 12. Ruiying Du, **Chunyu Ai**, Longjiang Guo, Jing Chen, Jianwei Liu, Jing He, and Yingshu Li, "A Novel Clustering Topology Control for Reliable Multi-hop Routing in Wireless Sensor Networks," *Journal of Communications*, Vol 5, No 9 (2010), 654-664, Oct 2010.
- Chunyu Ai, Hailong Hou, Yingshu Li, and Raheem Beyah, "Authentic delay bounded event detection in heterogeneous wireless sensor networks," *Ad Hoc Network*, 7, 3, pp. 599-613, May 2009.
- 14. Weiping Wang, Jianzhong Li, **Chunyu Ai**, and Shengfei Shi, "Continuously Evaluating Approximate Similarity Search on High Dimensional Data Stream," *The Journal of Digital Information Management*, 4(1), pp. 82-86, March 2006.
- 15. Dongdong Zhang, Jianzhong Li, Weiping Wang, Longjiang Guo, and **Chunyu Ai**, "Reducing communication overhead over distributed data streams by filtering frequent items," *The Journal of Digital Information Management*, 3(2), pp. 101-107, June 2005.
- 16. **Chunyu Ai**, Jianzhong Li, and Hong Gao, "An Efficient Data Declustering Method RCMD in Parallel Database", *Computer Science*, 32(11) 2005, pp. 108-111.

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The 8th APWeb-WAIM joint international conference on Web and Big Data

- 1. Meirui Ren, Longjiang Guo, and **Chunyu Ai**, "Clustering based Collaborative Learning Grouping for Knowledge Building", accepted by the 8th APWeb-WAIM International Joint Conference on Web and Big Data, 2024.
- 2. Jiachen Ma, Jing Dai, Yong Liu, Meng Han, and **Chunyu Ai**, "Contrastive Learning for Rumor Detection via Fitting Beta Mixture Model", *Proceedings of the 32nd ACM International Conference on Information and Knowledge Management*, 4160-4164, 2023.
- 3. Xudong Zhang, Feng Gu, Wei Zhong, and **Chunyu Ai**, "A Hybrid Resampling Technique with Adaptive Intervals Used in the Parallel/Distributed Particle Filters", *7th International Conference on Computer Science and Artificial Intelligence (CSAI 2023)*, 319-325.
- 4. **Chunyu Ai**, Wei Zhong and Longjiang Guo, "Reinforcement Learning Based Group Event Invitation Algorithm", *International Conference on Wireless Algorithms, Systems Applications (WASA 2020)*, 3-14, 2020.
- Ruonan Zhao, Lichen Zhang, Xiaoming Wang, Chunyu Ai, Fei Hao and Yaguang Lin, "An Efficient Energy-Aware Probabilistic Routing Approach for Mobile Opportunistic Networks", In Proceedings of 13th International Conference on Wireless Algorithms, Systems, and Applications (WASA 2018), Springer, Tianjin, China, June 20-22, 2018 pp. 671-682.
- Meng Han, Jinbao Wang, Zhuojun Duan, Mingyuan Yan, Chunyu Ai and Zhen Hong, "Near-Complete Privacy Protection: Cognitive Optimal Strategy in Location-Based Services", Conference on Identification, Information & Knowledge in the Internet of Things (IIKI 2017), Qufu, China, Oct 19-21, 2017.
- Weitian Tong, Scott Buglass, Jeffrey Li, Lei Chen, Chunyu Ai, "Smart and Private Social Activity Invitation Framework Based on Historical Data from Smart Devices", 10th EAI International Conference on Mobile Multimedia Communications, July 13-14, 2017, Chongqing China, Proceedings of the 10th EAI International Conference on Mobile Multimedia Communications, December 2017, Pages 143–152.
- 8. **Chunyu Ai**, Meng Han, Jinbao Wang, and Mingyuan Yan, "An Efficient Social Event Invitation Framework based on Historical Data of Smart Devices", *The 9th IEEE International Conference on Social Computing and Networking*, October 8-10, 2016, Atlanta.
- 9. Mingyuan Yan, **Chunyu Ai**, Meng Han, Zhipeng Cai, and Yingshu Li "Data Aggregation Scheduling in Probabilistic Wireless Networks with Cognitive Radio Capability", *IEEE Global Communication Conference (GLOBECOM 2016)*, December 4-8, 2016, Washington, DC.
- 10. Jinbao Wang, Zhipeng Cai, Chunyu Ai, Donghua Yang, Hong Gao, and Jianzhong Li, "Differentially Private k-Anonymity: Achieving Query Privacy in Location-Based Services", International Conference on Identification, Information and Knowledge in the Internet of Things for 2016, October 20-21, 2016, Beijing.
- 11. Feng Gu, Rida Syeda, and **Chunyu Ai**, "Geo-referenced image data assimilation for wildfire spread simulation", *In Proceedings of the 49th Annual Simulation Symposium (ANSS '16)*. Society for Computer Simulation International, San Diego, CA, USA, Article 11, 8 pages.

- 12. Feng Gu, Mohammad Butt, Chunyu Ai, Xiaoke Shen, and Jiehao Xiao. "Adaptive particle filtering in data assimilation of wildfire spread simulation". In Proceedings of the Conference on Summer Computer Simulation (SummerSim '15), Society for Computer Simulation International, San Diego, CA, USA, 1-10, 2015.
- Chunyu Ai and Frank Haizhon Li. "Isolate Safe Area Detection for Rescue in Wireless Sensor Networks." In Proceedings of the 9th International Conference on Wireless Algorithms, Systems, and Applications, Vol. 8491. Springer-Verlag New York, Inc., New York, NY, USA, 718-728, 2014.
- 14. **Chunyu Ai**, Wei Zhong, Mingyuan Yan, Feng Gu, "Partner Matching Applications of Social Networks". *In Proceeding of International Computing and Combinatorics Conference. Springer International Publishing*, 2014, pp. 647-656.
- 15. Ning Tian, Longjiang Guo, Meirui Ren, Chunyu Ai, "Implementing the Matrix Inversion by Gauss-Jordan Method with CUDA", In Proceedings of the 9th International Conference on Wireless Algorithms, Systems, and Applications, Vol. 8491. Springer-Verlag New York, Inc., New York, NY, USA, pp. 44-53, 2014.
- 16. Ning Tian, Longjiang Guo, **Chunyu Ai**, Meirui Ren, Jinbao Li, "GPU Acceleration of Finding Maximum Eigenvalue of Positive Matrices", *In International Conference on Algorithms and Architectures for Parallel Processing (pp. 231-244)*. Springer International Publishing.
- 17. Shufang Du, Longjiang Guo, **Chunyu Ai**, Jinbao Li and Meirui Ren, "GPU Acceleration of Finding Frequent Patterns over Large Biological Sequence", *In 20th IEEE International Conference on Parallel and Distributed Systems (ICPADS)*, Hsinchu, Taiwan December 16-19, 2014.
- 18. Shufang Du, Longjiang Guo, Chunyu Ai, Meirui Ren, Hao Qu, and Jinbao Li, "GPU Acceleration of Finding LPRs in DNA Sequence Based on SUA Index", 2014 IEEE 33rd International Performance Computing and Communications Conference (IPCCC), Austin, TX, 2014, pp. 1-8.
- 19. Renda Wang, Longjiang Guo, Chunyu Ai, Jinbao Li, Meirui Ren and Keqin Li, "An Efficient Graph Isomorphism Aglorithm Based on Canonical Labeling and its Parallel Implementation on GPU", the 15th IEEE International Conference on High Performance Computing and Communications (HPCC 2013), Zhangjiajie, China, November 13015, 2013.
- 20. Xinjing Wang, Longjiang Guo, Chunyu Ai, Jinbao Li, Zhipeng Cai, "An Urban Area-Oriented Traffic Information Query Strategy in VANETs", In Proceedings of the 8th international conference on Wireless Algorithms, Systems and Applications (WASA' 13), Springer-Verlag, Berlin, Heidelberg, 2013, pp. 313-324.
- Himali Saxena, Chunyu Ai, Marco Valero, Yingshu Li, and Raheem Beyah, "DSF A
  Distributed Security Framework for heterogeneous wireless sensor networks," Military
  Communications Conference, 2010 MILCOM 2010, vol., no., pp.1836-1843, Oct. 31 2010Nov. 3 2010.
- 22. **Chunyu Ai**, Longjiang Guo, Zhipeng Cai, and Yingshu Li, "Processing Area Queries in Wireless Sensor Networks," *5th International Conference Mobile Ad-hoc and Sensor Networks*, 2009 (MSN '09), vol., no., pp.1-8, 14-16 Dec. 2009.
- 23. Chunyu Ai, Ruiying Du, Minghong Zhang, and Yingshu Li, "In-Network Historical Data Storage and Query Processing Based on Distributed Indexing Techniques in Wireless Sensor

- Networks," *Wireless Algorithms, Systems, and Applications, WASA 2009*, pp. 264-273, August 16-18, 2009.
- 24. Longjiang Guo, Chunyu Ai, Xiaoming Wang, Zhipeng Cai, and Yingshu Li, "Real time clustering of sensory data in wireless sensor networks," *IEEE 28th International Performance Computing and Communications Conference (IPCCC)*, 2009, vol., no., pp.33-40, 14-16 Dec. 2009.
- 25. Yingshu Li, **Chunyu Ai**, Deshmukh W.P., and Yiwei Wu, "Data Estimation in Sensor Networks Using Physical and Statistical Methodologies," *The 28th International Conference on Distributed Computing Systems*, 2008. ICDCS '08, vol., no., pp.538-545, 17-20 June 2008.
- 26. Yiwei Wu, **Chunyu Ai**, Shan Gao, and Yingshu Li, "p -Percent Coverage in Wireless Sensor Networks," *Wireless Algorithms, Systems, and Applications, WASA 2008*, pp. 200-211, October 26-28, 2008.
- Weiping Wang, Jianzhong Li, Chunyu Ai, and Yingshu Li, "Privacy protection on sliding window of data streams," *International Conference on Collaborative Computing: Networking, Applications and Worksharing, 2007. CollaborateCom 2007*, vol., no., pp.213-221, 12-15 Nov. 2007.
- 28. My T. Thai, Yingshu Li, Chunyu Ai and Ding-Zhu Du, "On the Construction of Energy Efficient Broadcast Tree with Hitch-Hiking in Wireless Networks," 24th IEEE International Performance Computing and Communications Conference, (IPCCC 2005), vol., no., pp. 135-139, 7-9 April 2005.
- 29. DongDong Zhang, Jianzhong Li, Weiping Wang, Longjiang Guo, and **Chunyu Ai**, "Processing Frequent Items over Distributed Data Streams," *Web Technologies Research and Development APWeb 2005*, pp.523-529, March 29 April 1, 2005.
- 30. **Chunyu Ai**, Jianzhong Li, Hong Gao, Weiping Wang, "Adaptive Chosen Algorithm of Data Declustering and On-line Conversion Strategy in Parallel Database," *20th NDBC, Oct 10-12, Changsha, China. Computer Science*, Vol. 30 No.10 (supplement) 2003, pp. 124-128.

# OTHER PUBLICATIONS

• Wei Zhong and Chunyu Ai, "Applying a Novel Deep Learning System to Local Protein Structure Prediction", 16th Annual SCUpstate Research Symposium, 2020, 143-145.

# **PRESENTATIONS**

- The 15th International Conference on Wireless Algorithms, Systems, and Applications, Virtual Conference, September 13-15, 2020.
  - Topic: "Reinforcement Learning Based Group Event Invitation Algorithm"
- The 9th IEEE International Conference on Social Computing and Networking, Atlanta, Georgia, USA, October 8-10, 2016.
  - Topic: "An Efficient Social Event Invitation Framework based on Historical Data of Smart Devices"

 The 9th International Conference on Wireless Algorithms, Systems, and Applications, Harbin, China, June 23-25, 2014.

Topic: "Isolate Safe Area Detection for Rescue in Wireless Sensor Networks"

 The 20th International Computing and Combinatorics Conference, Atlanta, GA, USA, August 4-6, 2014.

Topic: "Partner Matching Applications of Social Networks"

• The 33rd IEEE International Performance, Computing, and Communication Conference, Austin, Texas, USA, December 5-7, 2014.

Topic: "GPU Acceleration of Finding LPRs in DNA Sequence Based on SUA Index"

 The 4th International Conference on Wireless Algorithms, Systems, and Applications, Boston, USA, August 16-18, 2009.

Topic: "In-network historical data storage and query processing based on distributed indexing techniques in wireless sensor"

 The 28th International Conference on Distributed Computing Systems, Beijing, China, June 17-20, 2008.

Topic: "Data Estimation in Sensor Networks Using Physical and Statistical Methodologies"

## PROFESSIONAL ACTIVITIES

- Session Chair of the 39th IEEE International Performance Computing and Communications Conference, November 6-8, 2020.
- Publicity Chair of the 5<sup>th</sup> IEEE Cyber Science and Technology Congress, June 22-26, 2020, Calgary, Canada.
- *Publicity Chair* of the 13th International Symposium on Bioinformatics Research and Applications (ISBRA), Honolulu, Hawaii, May 29 June 1, 2017.
- *Publicity Chair* of the 12th International Conference on Wireless Algorithms, Systems, and Applications, Guilin, China, June 19-21, 2017.
- *Publicity Chair* of the 35th IEEE International Performance, Computing, and Communication Conference, Las Vegas, USA, December 9-11, 2016.
- *Publicity Chair* of The 22nd International Computing and Combinatorics Conference, Ho Chi Minh City, Vietnam, August 2-4, 2016.
- *Publicity Chair* of the 9th IEEE International Conference on Social Computing and Networking, Atlanta, Georgia, USA, October 8-10, 2016.
- Session Chair of the 9th IEEE International Conference on Social Computing and Networking, Atlanta, Georgia, USA, October 2016.
- Session Chair of 52nd Annual ACM Southeast Conference, Kennesaw, Georgia, USA, March 28-29, 2014.
- *Publicity Chair* of the 9th International Conference on Wireless Algorithms, Systems, and Applications, Harbin, China, June 23-25, 2014.
- Session Chair of IEEE Global Communications Conference, Atlanta, Georgia, USA, December

- 9-13, 2013.
- *Publication Chair* of The Second ACM International Workshop on Foundations of Wireless Ad Hoc and Sensor Networking and Computing, New Orleans, LA, USA, May 18, 2009.
- Technical Program Committee member of
  - 2024 IEEE Annual Congress on Artificial Intelligence of Things
  - o 2022 IEEE Wireless Communications and Networking Conference
  - o 2021 IEEE Wireless Communications and Networking Conference
  - 2021 the 40<sup>th</sup> IEEE International Performance Computing and Communications Conference
  - 2020 the 39<sup>th</sup> IEEE International Performance Computing and Communications Conference
  - 2019 IEEE Wireless Communications and Networking Conference
  - o 2019 the 38<sup>th</sup> IEEE International Performance Computing and Communications
  - 2019 IEEE ICC Ad-Hoc and Sensor Networks Symposium
  - o 2018 IEEE GLOBECOM Ad-Hoc and Sensor Networks Symposium
  - 2018 IEEE GLOBECOM Mobile and Wireless Networks Symposium
  - o 2018 IEEE ICC Ad-Hoc and Sensor Networks Symposium
  - 2018 IEEE ICC Workshop Information-Centric Edge Computing and Caching for Future Networks (ICECC)
  - o 2018 IEEE/CIC International Conference on Communications in China (ICCC)
  - o 2018 IEEE 5G World Forum (WF-5G)
  - o 2017 IEEE GLOBECOM Ad-Hoc and Sensor Networks Symposium
  - o 2017 IEEE GLOBECOM Mobile and Wireless Networks Symposium
  - 2017 IEEE the 36<sup>th</sup> International Performance Computing and Communications Conference
  - o 2017 IEEE ICC Ad-Hoc and Sensor Networks Symposium
  - o 2017 IEEE ICC Mobile and Wireless Networks Symposium
  - 2016 IEEE GLOBECOM Communication Software, Services and Multimedia Applications Symposium
  - o 2016 IEEE GLOBECOM Ad-Hoc and Sensor Networks Symposium
  - o 2016 IEEE GLOBECOM Mobile and Wireless Networks Symposium
  - o 2016 IEEE ICC Ad-Hoc and Sensor Networks Symposium
  - o 2016 IEEE International Conference on Connected Vehicles and Expo
  - o 2016 IEEE International Performance Computing and Communications Conference
  - o 2015 IEEE International Performance Computing and Communications Conference
  - o 2015 IEEE International Conference on Connected Vehicles and Expo
  - o 2015 IEEE ICC Ad-Hoc and Sensor Networks Symposium
  - o 2014 52nd Annual ACM Southeast Conference
  - o 2014 IEEE International Performance Computing and Communications Conference
  - $\circ$  2014 IEEE International Conference on Connected Vehicles and Expo
  - 2014 International Conference on Advanced Computing, Networking, and Informatics
  - o 2013 10th IEEE International Conference on Mobile Ad hoc and Sensor Systems
  - o 2013 IEEE ICC Ad-Hoc and Sensor Networks Symposium

- o 2013 IEEE GLOBECOM Ad-Hoc and Sensor Networks Symposium
- 2013 IEEE International Conference on Connected Vehicles and Expo GC'12 AHSN
- o 2011 GC Ad-Hoc and Sensor Networks Symposium
- o 2011 IEEE International Performance Computing and Communications Conference
- o 2011 International Computing and Combinatorics Conference
- 2009 IEEE International Performance Computing and Communications Conference
- *Organizer* of N2WOMEN in ICDCS 2008, The 28th International Conference on Distributed Computing Systems, Beijing, China, June 17 20, 2008.

#### REFEREE SERVICE FOR

#### JOURNALS

- ♦ IEEE Internet of Things Journal (IoT)
- ♦ Computational Social Networks (CSON)
- ♦ ACM Transactions on Sensor Networks (TOSN)
- ♦ International Journal of Sensor Networks (IJSNET)
- ♦ Transactions on Emerging Telecommunications Technologies (ETT)
- ♦ IEEE Transactions on Parallel and Distributed Systems (TPDS)
- ♦ IEEE Transactions on Wireless Communications (TWC)
- ♦ International Journal of Distributed Sensor Networks (IJDSN)
- ♦ International Journal of Advancements in Computing Technology (IJACT)
- ♦ International Journal of Information and Communication Technology
- ♦ Journal on Wireless Communication and Networking (JWCN)
- ♦ Journal of Computer Systems, Networks, and Communications (JCSNC)
- ♦ Journal of Cluster Computing
- ♦ The Journal of Computers
- ♦ Wireless Communications and Mobile Computing (WCM)
- ♦ Computational Social Networks
- ♦ Ad Hoc & Sensor Wireless Networks
- ♦ Ad Hoc Networks
- ♦ Sensors
- ♦ Wireless Networks
- ♦ Advances in Information Sciences and Service Sciences (AISS)
- ♦ Mobile Networks and Applications
- ♦ Theoretical Computer Science
- ♦ Pervasive and Mobile Computing
- ♦ INFORMS Journal on Computing

### • INTERNATIONAL CONFERENCES

- ♦ 40<sup>th</sup> IEEE International Performance Computing and Communications Conference, Austin, Texas, USA, October 29-31, 2021.
- → 39<sup>th</sup> IEEE International Performance Computing and Communications Conference, Austin, Texas, USA, November 6-8, 2020.

- ♦ 38<sup>th</sup> IEEE International Performance Computing and Communications Conference, London, UK, October 29-31, 2019.
- ♦ IEEE International Conference on Communications Ad-Hoc and Sensor Networks Symposium, Shanghai, China, May 20-24, 2019.
- → IEEE Wireless Communications and Networking Conference, Marrakech, Morocco, April 15-19, 2019.
- → 37<sup>th</sup> IEEE International Performance Computing and Communications Conference, Orlando, Florida, USA, November 17-19, 2018.
- → IEEE/CIC International Conference on Communications in China, Beijing, China, August 16-18, 2018.
- → IEEE GLOBECOM Ad-Hoc and Sensor Networks Symposium, Abu Dhabi, UAE, December 9-13, 2018.
- ♦ IEEE 5G World Forum, Santa Clara, California, USA, July 9-11, 2018.
- ♦ IEEE International Conference on Communications Information-Centric Edge Computing and Caching for Future Networks, Kansas City, USA, May 20-24, 2018.
- ♦ IEEE International Conference on Communications Ad-Hoc and Sensor Networks Symposium, Kansas City, USA, May 20-24, 2018.
- ♦ 36<sup>th</sup> IEEE International Performance Computing and Communications Conference, San Diego, California, USA, December 10-12, 2017.
- ♦ IEEE GLOBECOM Ad-Hoc and Sensor Networks Symposium, Singapore, December 48, 2017.
- ♦ IEEE GLOBECOM Mobile and Wireless Networking, Singapore, December 48, 2017.
- IEEE International Conference on Communications Ad Hoc and Sensor Networking, Paris, France, May 21-25, 2017.
- → IEEE International Conference on Communications Mobile and Wireless Networking, Paris, France, May 21-25, 2017.
- IEEE International Conference on Communications Ad Hoc and Sensor Networking, Kuala Lumpur, Malaysia, May 23-27, 2016.
- IEEE International Conference on Communications Mobile and Wireless Networking, Kuala Lumpur, Malaysia, May 23-27, 2016.
- ♦ The 35th IEEE International Performance Computing and Communications Conference, Las Vegas, Nevada, USA, December 9-11, 2016.
- ♦ The 21st International Conference on Database Systems for Advanced Applications, Dallas, TX, USA, April 16-19, 2016.
- → IEEE Global Communications Conference Ad Hoc and Sensor Networking, Washington, DC USA, December 4-8, 2016.
- ♦ The 34th IEEE International Performance Computing and Communications Conference, Nanjing, China, December 14-16, 2015.
- → IEEE International Conference on Communications Ad Hoc and Sensor Networking, London, UK, June 8-12, 2015.
- ♦ The 3rd International Conference on Connected Vehicles and Expo, Messe, Wien, Vienna, Austria, November 3-7, 2014.

- ♦ IEEE International Conference on Computer Communications, Toronto, Canada, April 27-May 2, 2014.
- ♦ The 33rd IEEE International Performance Computing and Communications Conference, Austin, Texas, USA, December 5-7, 2014.
- The 23rd International Conference on Computer Communications and Networks, Shanghai, China, August 4-7, 2014.
- → The 10th IEEE International Conference on Mobile Ad-hoc and Sensor Systems, Hangzhou, China, October 14-16, 2013.
- ♦ International Conference on Connected Vehicles and Expo, Las Vegas, Nevada, USA, December 2-6, 2013.
- ♦ IEEE International Conference on Communications Ad Hoc and Sensor Networking, Budapest, Hungary, June 9-13, 2013.
- → IEEE Global Communications Conference Ad Hoc and Sensor Networking, Atlanta, Georgia, USA, December 9-13, 2013.
- ♦ IEEE Global Communications Conference 2012 Ad Hoc and Sensor Networking Symposium Program, Anaheim, California, USA, December 3-7, 2012.
- ♦ The 1<sup>st</sup> International Conference on Connected Vehicles, Beijing, China, December 12-16, 2012.
- → IEEE International Performance Computing and Communications Conference, Austin, Texas, USA, December 1-3, 2012.
- ♦ IEEE GLOBECOM 2011 Ad-hoc and Sensor Networking, Houston, Texas, USA, December 5-9, 2011.
- ♦ The 5th Annual International Conference on Combinatorial Optimization and Applications, Zhangjiajie, China, August 4-6, 2011.
- ♦ The 17th International Computing & Combinatorics Conference, Dallas, Texas, USA, August 14-16, 2011.
- ♦ The 30th IEEE International Performance Computing and Communications Conference, Orlando, Florida, USA, November 17-19, 2011.
- ♦ IEEE Wireless Communications & Networking conference, Australia, 18-21 April 2010.
- ♦ 2010 American Control Conference, Baltimore, Maryland, USA, June 30 July 2, 2010.
- → IEEE Wireless Communications & Networking conference, Australia, 18-21 April 2010.
- ♦ 28th IEEE International Performance Computing and Communications Conference, Phoenix, Arizona, USA, December 14-16, 2009.
- ♦ The International Conference on Wireless Algorithms, Systems and Applications, Boston, MA, USA, Aug 16, 2009 - Aug 18, 2009.
- → The Fifth International Conference on Mobile Ad-hoc and Sensor Networks, Wu Yi Mountain, China, 14-16 December 2009.
- 6th IEEE International Conference on Mobile Ad-hoc and Sensor Systems, Macau SAR, China, October 12-15, 2009.
- ♦ IEEE Globecom 2009 Wireless Networking Symposium, Hawaii, USA, November 30 December 4, 2009.

# • Magellan proposals

- ♦ Review 4 Magellan proposals, Fall 2019
- ♦ Review 4 Magellan proposals, Fall 2016
- ♦ Review 2 Magellan proposals, Fall 2015
- ♦ Review 4 Magellan proposals, Spring 2015

# **GRANTS & AWARDS**

- Teaching and Productivity Scholarship (TAPS), USC Upstate, 2020. (\$395)
- Teaching and Productivity Scholarship (TAPS), USC Upstate, 2016-2017. (\$1012)
- Teaching and Productivity Scholarship (TAPS), USC Upstate, 2013-2014. (\$2000)
- PI, Scholarly Startup, USC Upstate, July 1, 2014 June 30, 2015. (\$5000)
- PI, Intelligent Wireless Sensor Networking Monitoring System, Research Initiative for Summer Engagement (RISE), USC Upstate, May 15, 2014- December 31, 2014. (\$4995)
- Technology Request for updating the network lab, USC Upstate, Feb 2014. (\$6266)
- Mentor, Magellan Scholar proposal: Intelligent Wireless Sensor Network Monitoring System,
   May 2015. (\$3000)
- Faculty Development Research Grant, Troy University, 2012.
- Dissertation Grant Award, Georgia State University, 2010.
- Outstanding Graduate Student Award, Georgia State University, 2010.
- Best Paper Award, MSN 2009.
- Fellowship of Networking Networking Women (N^2 Women), 2008.
- Travel grant from WASA 2009, International Conference on Wireless Algorithms, Systems and Applications, Boston MA, USA, August 16-18, 2009.

### **SERVICE**

### **Division Committees**

- MCS Peer Review 2018-2019
- Search Committee of one CS Assistant Professor Position, 2023
- Chair of Search Committee of one CS Associate/Assistant Professor Position, 2023
- Search Committee of one CS Assistant Professor Position, 2023
- Chair of Search Committee of one CS Assistant Professor Position, 2022
- Search Committee of one CS Assistant Professor Position, 2021
- Search Committee of one Instructor Position, 2019
- Search Committee of two Math Assistant Professor Positions, 2018
- Search Committee of one Instructor Positions, 2018
- Search Committee of two CS Assistant Professor Positions, 2017
- Search Committee of two Instructor Positions, 2017
- Mentor of new faculty, 2018-2020
- Mentor of new faculty, 2022-2024
- Search Committee of an Assistant Professor Position, 2017
- Search Committee of Instructor Position, 2017
- Search Committee of Instructor Position, 2013

## **University Committees**

- General Education (Aug 2018 May 2024)
- Faculty Senate (Aug 2017 May 2018)
- Faculty Senate (Jan 2019 May 2019)
- Faculty Advisory Committee (Aug 2017 May 2018)
- University Assessment Committee (May 2013 Aug 2015).
- Faculty Senate (Aug 16, 2015 Aug 15, 2018)
- Faculty Advisory Committee (Aug 2016 July 2017)

### **Other University Services**

- Peer Observation of Teaching for one faculty, 2023
- IES Peer Review Committee 2023-2024
- JCBC Peer Review Committee 2018-2019
- Search Committee of one Assistant Professor Position of Chemistry, 2018
- Peer Observation of Teaching for one faculty, 2020
- Organize Dual Degree Program Orientation, Feb 22, 2017

# **Community Service**

- Judge of Piedmont Region III Science Fair, Spring 2024.
- Judge of Piedmont Region III Science Fair, Spring 2021.
- Judge of Piedmont Region III Science Fair, Spring 2020.
- Judge of Piedmont Region III Science Fair, Spring 2019.
- Judge of Piedmont Region III Science Fair, Spring 2018
- Judge of Piedmont Region III Science Fair, Spring 2015
- Judge of Piedmont Region III Science Fair, Spring 2013
- Judge of Duke Energy Invention Convention, 2017
- Judge of Duke Energy Invention Convention, 2016
- Judge of Duke Energy Invention Convention, 2015