SUXIA CUI

PUBLICATIONS

Book Chapters:
1. S. Cui, and S. Homsi, "Deep Reinforcement for Co-resident Attack Mitigation in the Cloud," New Perspectives for AI and Cybersecurity, *IntechOpen,* accepted, to appear.

Selected Journal Articles:
2. L. Zhai, S. Cui, Y. Wang, S. Wang, J. Zhou, and G. Wilsbacher, "Historical Blurry Video-based Face Recognition," Image Communication*, Elsevier,* submitted.
3. Y. Zhou, S. Cui, and Y. Wang, "Machine Learning Based Embedded Code Multi-Label Classification," *IEEE* Access*,* Oct. 27, 2021, vol. 9, pp. 150187 – 150200, ISSN: 2169-3536, DOI: 10.1109/ACCESS.2021.3123498.
4. S. Cui and Y. Wang, "Improving Light Field Camera Image Compression," *EURASIP Journal on Image and Video Processing*, submitted.
5. R. McLean, and S. Cui, "Attendance Tracking System Using Deep Learning Based Face Recognition," *The Technology Interface International Journal*, accepted, to appear.
6. W. Zhan, B. Hur, Y. Wang, S. Cui, and B. Yalvac, "Creating Maker Culture in an Engineering Technology Program," *International Journal of Engineering Education*, Vol. 37, No. 3, pp. 712-720, 2021.
7. S. Cui, Y. Wang, "Engineering Applications in Precision Agriculture," *The Technology Interface International Journal*, vol. 20, No. 2, pp. 12-17, spring/summer 2020.
8. S. Cui, Y. Zhou, Y. Wang, and L. Zhai, "Underwater Object Detection Using Deep Learning," *Hindawi: Applied Computational Intelligence and Soft Computing*, article ID 3738108, vol. 2020, https://doi.org/10.1155/2020/3738108
9. M. Oteniya, S. Cui, Y. Wang, "Cybersecurity Challenges in Industry," *World Journal of Engineering research and Technology (WJERT)*, vol. 5, issue 4, July 2019.
10. M. N. O. Sadiku, S. Cui, Y. Wang, S. M. Musa, "Big Data in Agriculture," *International Journal of Advanced Research in Computer Science and Software Engineering (IJARCSSE)*, vol. 9, No. 4, pp. 70-72, April 2019.
11. M. N. O. Sadiku, Y. Wang, S. Cui, S. M. Musa, "Precision Agriculture: An Introduction," *International Journal of Advanced Engineering and Technology*, vol. 2, No. 2, pp. 31-32, May 2018.
12. M. N. O. Sadiku, Y. Wang, S. Cui, S. M. Musa, "Industrial Internet of Things," *International Journal of Advances in Scientific Research and Engineering (IJASRE)*, vol. 3, No. 11, pp. 1-5, December 2017.
13. Y. Zhang, S. Cui, and Y. Wang, "Reconstruction Improvements on Compressive Sensing," *Journal of Information Sciences & Computing Technologies (JISCT)*, vol. 6, No. 2, pp. 604-611, November 2017.
14. Y. Zhang, S. Cui, and Y. Wang, "Compressive Sensing Based Image Compression and Transmission for Noisy Channels," *International Journal of Modern Research in Electrical and Electronic Engineering*, vol. 1, No. 1, pp. 29-41, January 2017.
15. S. Cui, Y. Wang, L. Li, X. Peng, and B. Yalvac, "Introducing High Performance Computing to Undergraduate Students," *Computers in Education Journal*, vol. 7, No. 4, pp. 104-112, October 2016.
16. D. Bourgeois, S. Cui, Y. Wang, and P. H. Obiomon, "Development of a Decision Support System for Precision Agriculture," International Journal of Engineering Research and Technology (IJERT), vol. 4, Issue 10, pp. 226-231, October 2015, ISSN: 2278-0181.
17. G. Khan, S. Khan, D. Vaman, and S. Cui, "A Novel Resource Efficient DMMS Approach for Network Monitoring and Controlling Functions," International Journal of Wireless & Mobile Network (IJWMN), vol. 7, no. 1, Feb. 2015.
18. S. Khan, G. Khan, D. R. Vaman, S. T. Koay, and S. Cui, "Analyzing the Performance of the Dynamic Position Location and Tracking (D-PL&T) of Mobile Nodes Using Omni Directional Antenna in

MANET," International Journal of Computer Networks & Communications (IJCNC), vol. 7, no. 4, July 2015.

19. S. Cui, Y. Wang, X. Qian, and Z. Deng, "Image Processing Techniques in Shockwave Detection and Modeling," Journal of Signal and Information Processing, vol. 4, No. 3B, pp. 109-113, 2013.

20. S. Cui, Y. Wang, Y. Yang, F. M. Nave, K. T. Harris, "Connecting Incoming Freshmen With Engineering Through Hands-On Projects," *American Journal of Engineering Education*, vol. 2, No. 2, pp. 31-41, 2011.

21. Y. Wang, S. Cui, Y. Yang, and J. Lian, "Virtual Reality Mathematic Learning Module for Engineering Students," *Technology Interface Journal*, vol. 10, No. 1, Fall 2009.

22. Y. Wang and S. Cui, "Book Review: Digital Signal Processing," *The Technology Interface Journal*, vol. 9, No. 2, Spring 2009.

23. F. Nave, S. Frizell, S. Cui, J. Perkins, and P. Obiomon, "Charting the Course: The Impact and Implications of the Mentoring Experiences of Female Faculty in the College of Engineering at a HBCU", *Faculty Resource Network Online Journal: Advancing Women and Minorities in the Academy* (2008).

24. S. Cui, Y. Wang, and J. E. Fowler, "Motion Estimation and Compensation in the Redundant-Wavelet Domain Using Triangle Meshes," *Signal Processing: Image Communication*, Vol. 21, pp. 586-598, August 2006.

25. J. E. Fowler, S. Cui, and Y. Wang, "Motion Compensation Via Redundant-Wavelet Multihypothesis," *IEEE Transactions on Image Processing*, Vol. 15, pp. 3102-3113, October 2006.

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Selected Refereed Conference Papers:

1. Y. Wang, V. Zarghami, and S. Cui, "Fake Face Detection Using Local Binary Pattern and Ensemble Modeling," in *Proceedings of the IEEE International Conference on Image Processing*, Anchorage, AK, USA, September 2021, pp. 3917-3921, doi: 10.1109/ICIP42928.2021.9506460.

2. W. Zhan, Y. Wang, S. Cui, and B. Yalvac, "A Mini-Maker Faire via Zoom," in *Proceedings of the 2021 ASEE Gulf-Southwest Annual Conference*, Waco, TX, March 24-26, 2021.

3. S. Alam, Y. Alam, S. Cui, A. Akujuobi, and M. Chouikha, "Toward Developing a Realistic DDoS Dataset for Anomaly-Based Intrusion Detection," *in proceedings of the 39th IEEE International Conference on Consumer Electronics (ICCE)*, Virtual, Jan. 10-12, 2021.

4. W. Zhan, B. Hur, Y. Wang, S. Cui, and B. Yalvac, "Actively Engaging Project Based Learning through a Mini Maker Faire in an Engineering Technology Program," *ASEE 127th Annual Conference & Exposition*, 2020, Montreal, Quebec, Canada, June 21-24, 2020.

5. S. Cui, Y. Wang, and O. Ekwonnah, "Keystroke Dynamics on User Authentication," *The 4th International Conference on Cybernetics (CYBCONF)*, Beijing, China, July 5-7, 2019.

6. Y. Zhou, S. Cui, and Y. Wang, "Development of Machine learning Based Recommendation Engine for Embedded Programmer," *The 9th IEEE International Conference on Electronics Information and Emergency Communication (ICEIEC 2019)*, Beijing, China, July 12-14, 2019.

7. Y. Wang, S. Cui, W. Zhan, and B. Yalvac, "Cultivating the Maker Culture through Evidence-Based Pedagogies," *ASEE 126th Annual Conference & Exposition*, 2019, Tampa, FL, June 16-19, 2019.

8. S. C. Hsiung, L. Xu, F. Jao, Y. Wang, and S. Cui, "A Continued Efforts in TI ARM M4 Microcontroller Curricula Developments and Assessments between Three Different Institutions and Programs," *ASEE 126th Annual Conference & Exposition*, 2019, Tampa, FL, June 16-19, 2019.

9. W. Zhan, Y. Wang, S. Cui, and B. Yalvac, "Enhancing Student Learning with Maker Events," *International Conference on Industry, Engineering, and Management Systems I*, Clearwater Beach, FL, March 17-19, 2019.

10. S. Cui, O. Ekwonnah, and Y. Wang, "The Analysis of Emotions over Keystroke Dynamics," *2018 International Conference on Information, Electronic and Communication Engineering (IECE2018)*, Beijing, China, Oct. 28-29, 2018.
11. B. Yalvac, X. Peng, D. Eseryel, S. Cui, L.Li, Y. Zhang, A. Ketsetzi, and T. Yuan, "STEM Faculty Development Activities to Widen the Implementation of Evidence-Based Pedagogies," 2018 American Educational Research Association Annual Meeting, New York, NY, April 13-17, 2018.
12. Y. Zhou, S. Cui, Y. Wang, and L. Zhai, "A Refined Attitude Algorithm for AUV based on IMU," *the 15th International Conference on Scientific Computing (CSC'17)*, Las Vegas, NV, July 17-20, 2017.
13. B. Yalvac, A. Ketsetzi, X. Peng, S. Cui, L.Li, Y. Zhang, D. Eseryel, T. F. Eyupoglu, and T. Yuan, "Cultivating Evidence-Based Pedagogies in STEM Education," *ASEE 124th Annual Conference & Exposition,* Columbus, OH, June 25-28, 2017.
14. S. Cui, Y. Wang, L. Li, X. Peng, and B. Yalvac, "Introducing High Performance Computing to Undergraduate Students," *ASEE 123rd Annual Conference & Exposition*, New Orleans, LA, June 26-29, 2016.
15. X. Peng, T. Yuan, U. Nadeem, A. Ketsetzi, B. Yalvac, D. Eseryel, F. Eyupoglu, and S. Cui, "Assigning Students Teacher's Role: A Student-Centered Approach in Computer-Aided Design Education," ASME 2016 International Mechanical Engineering Congress and Exposition, vol. 5, No. IMECE2016-66871, pp. V005T06A008, Phoenix, AZ, Nov. 11-17, 2016.
16. S. Biswas, Y. Wang, and S. Cui, "Surgically Altered Face Detection Using Log-Gabor Wavelet," in *the Proceedings of the 12th International Computer Conference on Wavelet Active Media Technology and Information Processing (ICCWAMTIP)*, Chengdu, China, December 18-20, 2015, pp. 154-157.
17. Y. Wang and S. Cui, "Enhance Project-Based Learning Experience for Undergraduate Students with Wireless Sensor Network," *ASEE 122nd Annual Conference & Exposition*, Seattle, WA, June 14-17, 2015.
18. S. Cui and Y. Wang, "Enhance Computing Curricula with High Performance Computing Teaching and
Research," *ASEE 122nd Annual Conference & Exposition*, Seattle, WA, June 14-17, 2015.
19. Y. Zhou, S. Cui, and Y. Wang, "Design of Autonomous Underwater Vehicle (AUV) Control Unit," *2015 ASEE Gulf Southwest Annual Conference*, San Antonio, TX, March 25-27, 2015.
20. Y. Wang and S. Cui, "Hyperspectral Image Feature Classification using Stationary Wavelet Transform,"
Proceedings of the 2014 International Conference on Wavelet Analysis and Pattern Recognition (ICWAPR), Lanzhou, China, July 13-16, 2014.
21. S. Cui, Y. Wang, E. Risch, and D. Bourgeois, "Educational Project on Decision Support System for Precision Agriculture," *2014 ASEE Gulf Southwest Annual Conference*, New Orleans, LA, Mar. 2-4, 2014. http://asee-gsw.tulane.edu/pdf/educational-project-on-decision-support-system-for-precision-agriculture.pdf
22. S. Cui, and Y. Wang, "Creating On-line Materials for Computer Engineering Courses," *2014 ASEE Gulf Southwest Annual Conference*, New Orleans, LA, Mar. 2-4, 2014. http://asee-gsw.tulane.edu/pdf/creating- on-line-materials-for-computer-engineering-courses.pdf
23. Y. Wang, S. Cui, E. Risch, Y. Lan, J. Lian, and K. Lee, "Enhance Multi-Disciplinary Experience for Agriculture and Engineering Students with Agriculture Robotics Project," *2014 ASEE Gulf Southwest Annual Conference*, New Orleans, LA, Mar. 2-4, 2014. http://asee-gsw.tulane.edu/pdf/enhance-multi-disciplinary-experience-for-agriculture-and-engineering-students-with-agriculture-robotics-project.pdf
24. A. Lodgher, Y. Yang, and S. Cui, "Increasing the Aptitude and Confidence for Computer Science and Engineering in Texas Rural High Schools," *2014 ASEE Gulf Southwest Annual Conference*, New Orleans, LA, Mar. 2-4, 2014. http://asee-gsw.tulane.edu/pdf/increasing-the-aptitude-and-confidence-for-computer- science-and-engineering-in-texas-rural-high-schools.pdf

25. Y. Wang, Y. Lan, Y. Zheng, K. Lee, S. Cui, and J. Lian, "A UGV-Based Laser Scanner System for Measuring Tree Geometric Characteristics," in *Proceedings of 2013 SPIE International Symposium on Photoelectronic Detection and Imaging*, V ol. 8905, Beijing China, June 25-27, 2013, doi: 10.1117/12.2042341.

26. S. Cui, Y. Wang, and A. Kumar, "Introduce Computer Engineering to Middle School Students through a Science Project," in *Proceedings of ASEE 120th Annual Conference & Exposition*, Atlanta, Georgia, June 23-26, 2013.

27. S. Cui and Y. Wang, "Develop a Multi-platform Information and Communication Technology System for Precision Agriculture", in *Proceedings of 2013 International Symposium on Computer Science and Electrical Engineering,* June 14-16, 2013, Beijing, China.

28. S. Cui, Y. Yang, and A. Lodgher, "Media Computation Project for High School Students," in *Proceedings of the 2012 Hawaii University International Conferences*, Honolulu, Hawaii, July 2012.

29. Y. Wang, S. Cui, and J. Lian, "Construction of Agricultural Robot Platform," in *Proceedings of the 2012 Hawaii University International Conferences*, Honolulu, Hawaii, July 2012.

30. Y. Zhang, S. Cui, D.R.Vaman, "Optimized Compressive Image Sensing System over Mobile Wireless Noisy Channel," in *Proceedings of the 2012 International Conference on Image Processing, Computer Vision, & Pattern Recognition*, Las Vegas, Nevada, July 2012.

31. S. O. Aboagye, S. Cui, "Hyperspectral Image Feature Extraction and Selection Using Empirical Mode Decomposition PCA," in *Proceedings of the 2012 International Conference on Image Processing, Computer Vision, & Pattern Recognition*, Las Vegas, Nevada, July 2012.

32. A. Famodimu, S. Cui, Y. Wang, and C. M. Akujuobi, "Block-based Video Compressive Sensing with Exploration of Local Sparsity," in *Proceedings of the 2012 International Conference on Image Processing, Computer Vision, & Pattern Recognition*, Las Vegas, Nevada, July 2012.

33. Y. Wang, Y. Lan, J. Lian, and S. Cui, "Broaden Engineering Technology Students' Knowledge through Hands-on with Motion Robotics," *ASEE 119th Annual Conference & Exposition*, San Antonio, Texas, June 10-13, 2012.

34. S. Cui, Y. Yang, A. Lodgher, and K. Phelps, "Strengthen Computing Discipline Recruitment with Educators Collaboration," *2011 ASEE Gulf Southwest Annual Conference*, Houston, TX, Mar. 9-10, 2011. http://www.tech.uh.edu/aseegsw2011/papers/T3A-3.pdf

35. S. Cui, P. Obiomon, and P. Cofie, "Bridge Senior Design into Contemporary Issues," *2011 ASEE Gulf Southwest Annual Conference*, Houston, TX, Mar. 9-10, 2011. http://www.tech.uh.edu/aseegsw2011/papers/T1A-5.pdf

36. Y. Zhang, S. Cui, and D. R. Vaman, "Compressive Sensing Based Optimized Image Transmission over Wireless Gaussian Channel," in *Proceedings of the 2010 2nd International Conference on Intellectual Technique in Industrial Practice,* Changsha, China, Sept. 8-9, 2010.

37. S. Cui, J. Fuller, W. Ali, and P. Holland-Obiomon, "Educate New Generation on Nuclear Technology through Collaborating Engineering Project," in *Proceedings of the 2010 ASEE Northeast Section Conference*, Boston, MA, May 7-8 2010. (Track: Interdisciplinary programs, sustainability and alternative energy as related to engineering education)

38. S. Cui, Y. Wang, F. M. Nave, and K. T. Harris, "Teach Computer Techniques through Multimedia," *Proceedings of the 2010 ASEE Northeast Section Conference*, Boston, MA, May 7-8 2010. (Track: Tools, techniques, and best practices of engineering education for the digital generation.)

39. Y. Zhang, Y. Wang, K. M. Akujuobi, and S. Cui, "Engineering Technology Laboratory Enhancement with Lab VIEW," in *Proceedings of the 2010 ASEE annual conference & exposition*, Lousville, Kentucky, June 20-23, 2010.

40. S. Cui, Y. Wang, Y. Yang, and S. Koay, "Revamp Computer Education with Multimedia and Game," in *Proceedings of the 2010 ASEE annual conference & exposition*, Lousville, Kentucky, June 20-23, 2010.

41. Y. Wang, Y. Zhang, C. M. Akujuobi, and S. Cui, "Progress and Strategies of Engineering Technology Revamping Plan at PVAMU," *Earth & Space 2010*, Honolulu, HI, March 14-17.

42. Y. Wang, S. Cui, J. Lian, Y. Yang, and C. M. Akujuobi, "Image Completion in Redundant Wavelet Domain," in *Proceedings of the 2009 International Conference on Image Processing, Computer Vision, & Pattern Recognition*, Las Vegas, Nevada, July 2009.

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45. Y. Wang, S. Cui, J. Lian, and C. M. Akujuobi, "Image Object Removal in Redundant Wavelet Transform Domain," in *Proceedings of SPIE-IS&T Electronic Imaging*, San Jose, CA, January 2009, vol. 7245, pp. 72450C-1 to 72450C-8.

46. S. Cui, Y. Wang, Y. Zhang, and C. M. Akujuobi, "Laboratories Enhancement with LabVIEW-Based Graphical Development Tools," *ASEE annual conference & exposition*, Pittsburg, Pennsylvania, June 2008.

47. Y. Wang, S. Cui, J. Lian, and C. M. Akujuobi, "Perceptual Masking Video Watermarking in 3D-RDWT Domain," in *Proceedings of the 2008 International Conference on Image Processing, Computer Vision, & Pattern Recognition*, Las Vegas, Nevada, July 2008, vol. I, pp. 112-116.

48. S. Cui, Y. Wang, Y, Zhang, C. Akujuobi, "A Hands-on DSP Lab Design for Technology Students", *Texas Instruments Developer Conference Worldwide 2008,* Dallas, TX, Feb. 2008.

49. Y. Zhang, C. Akujuobi, S. Cui, Y. Wang, "Engineering Technology Undergraduate Labs Enhancement", *2008 National Instruments Week,* Austin, TX, Aug. 2008.

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51. S. Cui and Y. Wang, "Redundant Wavelet Transform in Video Signal Processing," in *Proceedings of the 2006 International Conference on Image Processing, Computer Vision, & Pattern Recognition*, Las Vegas, Nevada, June 2006.

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53. F. Nave, S. Frizell, P. Holland-Obiomon, S. Cui, J. Perkins, "Assessing the Impacts of the STEM - Enrichment Program on Women of Color", *Women in Engineering Programs and Advocates Network Proceedings*, Pittsburgh PA, June 2006.

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55. S. Cui, Y. Wang, and J. E. Fowler, "Explore the Multihypothesis Motion Compensation in Video Coding," in *Proceedings of SPIE*, Boston, Massachusetts, October 2005, vol. 6015, 60150A-1 – 60150A-10.

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PROFESSIONAL ACTIVITIES
- Senior member of IEEE.
- Member of the "Eta Kappa Nu" Honor Association.
- Member of SPIE.