

Wenjun Zhou

Lawson Professor of Business
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PROFESSIONAL EXPERIENCE

University of Tennessee Knoxville (UTK), Knoxville, Tennessee
Haslam College of Business (HCB), Department of Business Analytics & Statistics (BAS)
Lawson Professor of Business, 2023–present
Ph.D. in Management Science (Analytics) Program Director, 2023–present
Professor, since 2023; *Associate Professor*, 2018–2023; *Assistant Professor*, 2011–2018

IBM Research, San Jose, California, *Research Intern*, Summer 2010
Yahoo! Labs, Santa Clara, California, *Research Intern*, Summer 2009
Panasonic Inc., Princeton, New Jersey, *Summer Research Co-op*, Summer 2008
Lawrence Berkeley National Lab, Berkeley, California, *Intern*, Summer 2006

EDUCATION

Ph.D. in Information Technology, Rutgers University
M.S. in Biostatistics, University of Michigan, Ann Arbor
B.S. in Information Systems, University of Science and Technology of China

HONORS & AWARDS

Martin & Carol Robinson Excellence in Teaching, Research and Service Award, HCB, 2023
Martin Lee & Carol Fri Robinson Faculty Fellow, HCB, 2023
George and Margaret Melton Faculty Fellow, HCB, 2019–2023
Jerry L. Gibbs Faculty Research Fellow, HCB, 2021–2023
Roy & Audry Fancher Faculty Research Fellow, HCB, 2017–2021
Rising Star Research Award, HCB, 2021
Best Paper Award, INFORMS Workshop on Data Science, 2018
Best Student Paper Award, Academy of Management (AOM) Annual Meeting, 2017
Finalist, The Syngenta 2017 Crop Challenge in Analytics, 2017
R. Stanley Bowden II Faculty Research Fellow, HCB, 2016
Alumni Excellence in Academic Research Award, Rutgers Business School, 2014
Best Paper Award, International Conference on Web-Age Information Management, 2013
Outstanding Reviewer Award, *Knowledge and Information Systems*, Springer, 2013
SIGKDD Doctoral Dissertation Award Honorable Mention, ACM SIGKDD, 2011
CIMIC Research Award, Rutgers Business School, 2009
NSF Student Travel Award, IEEE ICDM, 2009
Best Student Paper Runner-Up Award, ACM SIGKDD, 2008
IBM Student Travel Award, ACM SIGKDD, 2008
Best Paper Runner-Up Award, IEEE ICTAI, 2006

RESEARCH (ORCID: 0000-0003-2346-8151)

Research Interests

Machine Learning and Artificial Intelligence
Data Mining, Knowledge Discovery, Statistical Computing
Applications in Online Media, FinTech, and Healthcare

Journal Articles Accepted or Published

1. Yuan, F., **Zhou**, W., Dodge, H. H., and Zhao, X. (2023). Short: Causal structural learning of conversational engagement for socially isolated older adults. *Smart Health*, 28. 100384.
2. Jiang, S., Guo, Y., **Zhou**, W., and Li, X. (2023). Identifying predictors of analyst rating quality: An ensemble feature selection approach. *International Journal of Forecasting (IJF)*, 39:1853–1873.
3. Yan, W. and **Zhou**, W. (2023). Is blockchain a cure for peer-to-peer lending? *Annals of Operations Research*, 321:693–716.
4. Liu, Z., Paek, E. J., Yoon, S. O., Casenhiser, D., **Zhou**, W., and Zhao, X. (2022). Detecting Alzheimer's disease using natural language processing of referential communication task transcripts. *Journal of Alzheimer's Disease*, 86(3):1385–1398.
5. Wu, S., Gao, X., and **Zhou**, W. (2022). COSLE: Cost sensitive loan evaluation for P2P lending. *Information Sciences*, 586:74–98.
6. Feng, Y. and **Zhou**, W. (2022). Work from home during the COVID-19 pandemic: An observational study based on a large geo-tagged COVID-19 twitter dataset (UsaGeoCov19). *Information Processing & Management*, 59(2). 102820.
7. Yan, W., Letizia, P., and **Zhou**, W. (2022). Three cobblers worth the mastermind? The potential of ensemble in crowd-sourced classification problems. *Decision Sciences*, 53:223–238.
8. Guo, Y., Jiang, S., **Zhou**, W., Luo, C., and Xiong, H. (2021). A predictive indicator using lender composition for loan scoring in P2P lending. *Financial Innovation*, 7(49).
9. Feng, Y., Lu, Z., **Zhou**, W., Wang, Z., and Cao, Q. (2020). New emoji requests from Twitter users: When, where, why, and what we can do about them. *ACM Transactions on Social Computing*, 3(2). Article 8.
10. Xiao, K., Ye, Z., Zhang, L., **Zhou**, W., Ge, Y., and Deng, Y. (2020). Multi-user mobile sequential recommendation for route optimization. *ACM Transactions on Knowledge Discovery from Data (TKDD)*, 14(5). Article 52.
11. Du, B., **Zhou**, W., Liu, C., Cui, Y., and Xiong, H. (2019). Transit pattern detection using tensor factorization. *INFORMS Journal on Computing (JOC)*, 31(2):193–206.
12. Du, B., Liu, C., **Zhou**, W., Hou, Z., and Xiong, H. (2019). Detecting pickpocket suspects from large-scale transit records. *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 31(3):465–478.
13. Sun, J., Xiao, K., Liu, C., **Zhou**, W., and Xiong, H. (2019). Exploiting intra-day patterns of market shocks: A machine learning approach. *Expert Systems with Applications*, 127:272–281.
14. Wang, T., Yang, H., Yu, H., **Zhou**, W., Liu, Y., and Song, H. (2019). A revenue-maximizing bidding strategy for demand-side platforms. *IEEE Access*, 7(1):68692–68706.
15. **Zhou**, W., Xiong, H., Duan, L., Xiao, K., and Mee, R. (2018). Paradoxical correlation pattern mining. *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 30(8):1561–1574.
16. Feng, Y., Lu, Z., **Zhou**, W., Cao, Q., and Li, X. (2018). A multi-granularity perspective for spatial profiling of mobile apps. *Information Sciences*, 430–431:127–141.
17. Wan, L., Wang, Z., Lu, Z., Feng, Y., Qi, H., **Zhou**, W., and Cao, Q. (2018). Approximate and sub-linear spatial queries for large-scale vehicle networks. *IEEE Transactions on Vehicular Technology*, 67(2):1561–1569.

18. Lu, Z., Feng, Y., **Zhou**, W., Cao, Q., and Li, X. (2017). Inferring correlation between user mobility and app usage in massive coarse-grained data traces. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)*, 1(4):Article No. 153.
19. Wan, L., Cao, Q., and **Zhou**, W. (2017). Optimizing the performance of sensor network programs through estimation-based code profiling. *Pervasive and Mobile Computing*, 42:285–298.
20. Cao, Q., Feng, Y., Lu, Z., Qi, H., Tolbert, L., Wan, L., Wang, Z., and **Zhou**, W. (2017). Approximate cardinality estimation (ACE) in large-scale internet of things deployments. *Ad Hoc Networks*, 66:52–63.
21. Feng, X., Wu, S., and **Zhou**, W. (2017). Multi-hypergraph consistent sparse coding. *ACM Transactions on Intelligent Systems and Technology (TIST)*, 8(6):Article No. 75.
22. Feng, X., Wu, S., **Zhou**, W., and Quan, M. (2017). Efficient locality weighted sparse representation for graph based learning. *Knowledge-Based Systems (KBS)*, 121:129–141.
23. Guo, Y., **Zhou**, W., Luo, C., Liu, C., and Xiong, H. (2016). Instance-based credit risk assessment for investment decisions in P2P lending. *European Journal of Operational Research (EJOR)*, 249(2):417–426.
24. Zhang, H., **Zhou**, W., and Parker, L. E. (2015). Fuzzy temporal segmentation and probabilistic recognition of continuous human daily activities. *IEEE Transactions on Human-Machine Systems*, 45(5):598–611.
25. **Zhou**, W. and Zhang, H. (2015). Correlation range query for effective recommendations. *World Wide Web*, 18(3):709–729.
26. Ji, S., Cherry, C. R., **Zhou**, W., Sawhney, R., Wu, Y., Cai, S., Wang, S., and Marshall, J. D. (2015). Environmental justice aspects of exposure to PM_{2.5} emissions from electric vehicle use in China. *Environmental Science & Technology*, 49(24):13912–20.
27. Wu, S., Feng, X., and **Zhou**, W. (2014). Spectral clustering of high-dimensional data exploiting sparse representation vectors. *Neurocomputing*, 135:229–239.
28. Mardookhy, M., Sawhney, R., Ji, S., Zhu, X., and **Zhou**, W. (2014). A study of energy efficiency in residential buildings in Knoxville, Tennessee. *Journal of Cleaner Production*, 85:241–249.
29. Lindley, L. C., **Zhou**, W., Mack, J. W., and Li, X. (2014). Pediatric hospice and palliative care: Designing a mobile app for clinical practice. *Computers, Informatics, Nursing*, 32(7):299–302.
30. **Zhou**, W. and Xiong, H. (2011). Checkpoint evolution for volatile correlation computing. *Machine Learning*, 83(1):103–131.
31. Ge, Y., Xiong, H., **Zhou**, W., Li, S., and Sahoo, R. (2011). Multi-focal learning for customer problem analysis. *ACM Transactions on Intelligent Systems and Technology (TIST)*, 2(3):Article No. 24.
32. Xiong, H., **Zhou**, W., Brodie, M., and Ma, S. (2008). Top-k ϕ correlation computation. *INFORMS Journal on Computing (JOC)*, 20(4):539–552.

Journal Articles Published with the “Get Fruved” Project

33. Castañeda, G., Colby, S. E., Olfert, M. D., Barnett, T. E., **Zhou**, W., Leite, W. L., Staub, D., and Mathews, A. E. (2023). Examining gender and the longitudinal effect of weight conscious drinking dimensions on body mass index among a college freshman cohort. *Journal of American College Health*, 71(5):1575–1583.
34. Allison, C., Colby, S., **Zhou**, W., and Hellwinckel, C. (2022). Development and validation of a food systems knowledge and attitudes survey for college students. *Journal of Hunger and Environmental Nutrition*, forthcoming.
35. Olfert, M. D., Barr, M. L., Mathews, A. E., Horacek, T. M., Riggsbee, K., **Zhou**, W., and Colby, S. E. (2022). Life of a vegetarian college student: Health, lifestyle, and environmental perceptions. *Journal of American College Health*, 70(1):232–239.
36. Castañeda, G., Colby, S. E., Olfert, M. D., Barnett, T. E., **Zhou**, W., Engel, M., and Mathews, A. E. (2021). The role of alcohol-related proactive dietary restriction to feel the psychoactive effects of alcohol faster on binge drinking frequency among freshmen college students. *Substance Use and Misuse*, 56(9):1266–1274.

37. Colby, S., **Zhou**, W., Allison, C., Mathews, A. E., Olfert, M. D., Morrell, J., Byrd-Bredbenner, C., Greene, G., Brown, O., Kattelman, K., and Shelnutt, K. (2020). Development and validation of the short healthy eating index (sHEI) survey with a college population to assess dietary quality and intake. *Nutrients*, 12. 2611.
38. Allison, C., Colby, S., Opoku-Acheampong, A., Kidd, T., Kattelman, K., Olfert, M. D., and **Zhou**, W. (2020). Accuracy of self-reported BMI using objective measurement in high school students. *Journal of Nutritional Science*, 9(e35):1–8.
39. El Zein, A., Colby, S. E., **Zhou**, W., Shelnutt, K., Greene, G., Horacek, T. M., Olfert, M. D., and Mathews, A. E. (2020). Food insecurity is associated with increased risk of obesity in US college students. *Current Developments in Nutrition*, 4(8).
40. Olfert, M. D., Barr, M. L., Hagedorn, R. L., Wattick, R. A., **Zhou**, W., Horacek, T. M., Mathews, A. E., Kattelman, K. K., Kidd, T., White, A. A., Brown, O. N., Morrell, J. S., Franzen-Castle, L., Shelnutt, K., Byrd-Bredbenner, C., Tolar-Peterson, T., Greene, G. W., and Colby, S. E. (2020). eB4CAST approach improves science communication with stakeholders in a college-based health program. *Frontiers in Public Health*, 8(158).
41. Castañeda, G., Colby, S. E., Barnett, T. E., Olfert, M. D., **Zhou**, W., Leite, W. L., El Zein, A., and Mathews, A. E. (2020). Examining the effect of weight conscious drinking on binge drinking frequency among college freshmen. *Journal of American College Health*, 68(8):906–913.
42. Staub, D., Colby, S. E., Olfert, M. D., Kattelman, K., **Zhou**, W., Horacek, T. M., Radosavljevic, I., Greene, G., Franzen-Castle, L., and Mathews, A. E. (2019). A multi-year examination of gardening experience and fruit and vegetable intake during college. *Nutrients*, 11. 2088.
43. Hanson, A. J., Kattelman, K. K., McCormack, L. A., **Zhou**, W., Brown, O. N., Horacek, T. M., Shelnutt, K. P., Kidd, T., Opoku-Acheampong, A., Franzen-Castle, L. D., Olfert, M. D., and Colby, S. E. (2019). Cooking and meal planning as predictors of fruit and vegetable intake and BMI in first-year college students. *International Journal of Environmental Research and Public Health*, 16. 2462.
44. El Zein, A., Shelnutt, K., Colby, S., Vilaro, M., **Zhou**, W., Greene, G., Olfert, M. D., Riggsbee, K., Morrell, J. S., and Mathews, A. (2019). Prevalence and correlates of food insecurity among U.S. college students: A multi-institutional study. *BMC Public Health*, 19(660).
45. Horacek, T. M., Simon, M., Yildirim, E. D., White, A. A., Shelnutt, K. P., Riggsbee, K., Olfert, M. D., Morrell, J. S., Mathews, A., **Zhou**, W., Kidd, T., Kattelman, K., Greene, G., Franzen-Castle, L., Colby, S., Byrd-Bredbenner, C., and Brown, O. (2019). Development and validation of the policies, opportunities, initiatives and notable topics (POINTS) audit for campuses and worksites. *International Journal of Environmental Research and Public Health*, 16. 778.
46. Sowers, M. F., Colby, S., Kavanagh, K., and **Zhou**, W. (2019). Testing product, pricing, and promotional strategies for vending machine interventions with a college population. *Journal of Foodservice Business Research*, 22(4).
47. Olfert, M. D., Barr, M. L., Charlier, C. C., Greene, G. L., **Zhou**, W., and Colby, S. E. (2019). Sex differences in lifestyle behaviors among U.S. college freshmen. *International Journal of Environmental Research and Public Health*, 16. 482.
48. Riggsbee, K. A., Riggsbee, J., Vilaro, M. J., Moret, L., Spence, M., Steeves, E. A., **Zhou**, W., Olfert, M. D., Franzen-Castle, L., Horacek, T., Hall, E., and Colby, S. (2019). More than fast food: Development of a story map to compare adolescent perceptions and observations of their food environments and related food behaviors. *International Journal of Environmental Research and Public Health*, 16. 76.
49. Olfert, M. D., Barr, M. L., Charlier, C. M., Famodu, O. A., **Zhou**, W., Mathews, A. E., Byrd-Bredbenner, C., and Colby, S. E. (2018). Self-reported vs. measured height, weight, and BMI in young adults. *International Journal of Environmental Research and Public Health*, 15. 2216.
50. Vilaro, M. J., Colby, S. E., Riggsbee, K., **Zhou**, W., Byrd-Bredbenner, C., Olfert, M. D., Barnett, T. E., Horacek, T., Sowers, M., and Mathews, A. E. (2018). Food choice priorities change over time and predict dietary intake at the end of the first year of college among students in the U.S. *Nutrients*, 10:1296.

51. Famodu, O. A., Barr, M. L., Colby, S. E., **Zhou**, W., Holásková, I., Leary, M. P., Bryd-Bredbenner, C., Mathews, A. E., and Olfert, M. D. (2018). Neck circumference positively relates to cardiovascular risk factors in college students. *International Journal of Environmental Research and Public Health*, 15. 1480.
52. Famodu, O. A., Barr, M. L., Holásková, I., **Zhou**, W., Morrell, J. S., Colby, S. E., and Olfert, M. (2018). Shortening of the Pittsburgh sleep quality index survey using factor analysis. *Sleep Disorders*, Article ID 9643937.
53. Sowers, M. F., Colby, S., **Zhou**, W., Odoi, A., Steeves, E. A., and Kavanagh, K. (2018). Frequency of vending machine usage as a predictor of weight status among college students. *International Journal of Nutrition and Food Sciences*, 7(2):39–46.
54. Sowers, M. F., Colby, S. E., Allison, C. L., and **Zhou**, W. (2018). Development and validation of a B.E.A.N. survey for college students. *Journal of Food and Nutrition Sciences*, 6(2):37–45.
55. Loso, J., Staub, D., Colby, S. E., Olfert, M. D., Kattelmann, K., Vilaro, M., Colee, J., **Zhou**, W., Franzen-Castle, L., and Mathews, A. E. (2018). Gardening experience is associated with increased fruit and vegetable intake among first-year college students: A cross-sectional examination. *Journal of the Academy of Nutrition and Dietetics*, 118(2):275–283.
56. Vilaro, M. J., **Zhou**, W., Colby, S. E., Byrd-Bredbenner, C., Riggsbee, K., Olfert, M. D., Barnett, T. E., and Mathews, A. E. (2017). Development and preliminary testing of the food choice priorities survey (FCPS): Assessing the importance of multiple factors on college students' food choices. *Evaluation and Health Professions*, 40(4):425–449.
57. Sowers, M. F., Colby, S., Greene, G. W., Pickett, M., Franzen-Castle, L., Olfert, M. D., Shelnutt, K., Brown, O., Horacek, T. M., Kidd, T., Kattelmann, K. K., White, A. A., **Zhou**, W., Riggsbee, K., Yan, W., and Byrd-Bredbenner, C. (2017). Survey development to assess college students' perceptions of the campus environment. *American Journal of Health Behavior*, 41(6):701–709.
58. Colby, S., **Zhou**, W., Sowers, M. F., Shelnutt, K., Olfert, M. D., Morrell, J., Koenings, M., Kidd, T., Horacek, T. M., Greene, G. W., Brown, O., White, A. A., Hoerr, S., Byrd-Bredbenner, C., and Kattelmann, K. K. (2017). College students' health behavior clusters: Differences by sex. *American Journal of Health Behavior*, 41(4):378–389.

Refereed Conference Proceedings Papers

1. Liu, Z., Qin, Y., Zou, H., Paek, E. J., Casenhiser, D., **Zhou**, W., and Zhao, X. (2022). Generating natural language responses in robot-mediated referential communication tasks to simulate theory of mind. In *Proceedings of the 14th International Conference on Social Robotics (ICSR 2022), Part I*, pages 100–109, Florence, Italy.
2. Liu, Z., Collier, P., Bray, R., Paek, E. J., **Zhou**, W., Casenhiser, D., and Zhao, X. (2022). Estimating human attitude during robot-mediated referential communication tasks. In *IEEE/ACM International Conference on Connected Health: Applications, Systems and Engineering Technologies (CHASE 2022)*, Washington, DC.
3. Liu, Z., Paek, E. J., Casenhiser, D., **Zhou**, W., and Zhao, X. (2022). Multi-modal vision-language modeling for dementia diagnosis. In *Modeling, Estimation and Control Conference (MECC 2022)*, Jersey City, NJ.
4. Fang, Z., Li, Y., Liu, C., Zhu, W., Zhang, Y., and **Zhou**, W. (2019). Large-scale personalized delivery for guaranteed display advertising with real-time pacing. In *Proceedings of the 2019 IEEE International Conference on Data Mining (ICDM 2019)*, pages 190–199, Beijing, China.
5. Yan, W., **Zhou**, W., Tan, C., and Fan, L. (2019). Employee ridesharing: reinforcement learning and choice modeling. In *Proceedings of the 2019 Annual Americas Conference on Information Systems (AMCIS 2019)*, Cancún, México.
6. Feng, Y., Lu, Z., Zheng, Z., Sun, P., **Zhou**, W., Huang, R., and Cao, Q. (2019). Chasing total solar eclipses on twitter: Big social data analytics for once-in-a-lifetime events. In *Proceedings of the 2019 IEEE Global Communications Conference (GlobeCom 2019)*, Waikoloa, Hawaii.
7. Feng, Y., **Zhou**, W., Lu, Z., Wang, Z., and Cao, Q. (2019). The world wants mangoes and kangaroos: A study of new emoji requests based on thirty million tweets. In *Proceedings of the 28th International Conference on World Wide Web (WWW 2019)*, pages 2722–2728, San Francisco, California.

8. Du, B., Tong, Y., Zhou, Z., Tao, Q., and **Zhou, W.** (2018). Demand-aware charger planning for electric vehicle sharing. In *Proceedings of the 24th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2018)*, pages 1330–1338, London, United Kingdom. ACM.
9. Ye, Z., Zhang, L., Xiao, K., **Zhou, W.**, Ge, Y., and Deng, Y. (2018). Multi-user mobile sequential recommendation: An efficient parallel computing paradigm. In *Proceedings of the 24th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2018)*, pages 2624–2633, London, United Kingdom.
10. Yan, W., **Zhou, W.**, Letizia, P., and Bichescu, B. (2017). Crowdsourcing data science for innovation. In *Proceedings of the 2017 IEEE International Conference on Data Mining Workshops (ICDMW)*, pages 1148–1157, New Orleans, Louisiana.
11. **Zhou, W.**, Yan, W., and Zhang, X. (2017). Collaboration for success in crowdsourced innovation projects: Knowledge creation, team diversity, and tacit coordination. In *Proceedings of the 50th Hawaii International Conference on System Sciences (HICSS 50)*, pages 381–390, Hilton Waikoloa Village, Hawaii.
12. **Zhou, W.**, Zhu, Y., Javed, F., Rahman, M., Balaji, J., and McNair, M. (2016). Quantifying skill relevance to job titles. In *Proceedings of the 2016 IEEE International Conference on Big Data (BigData 2016)*, pages 1532–1541, Washington D.C.
13. Du, B., Liu, C., **Zhou, W.**, Hou, Z., and Xiong, H. (2016). Catch me if you can: Detecting pickpocket suspects from large-scale transit records. In *Proceedings of the 22nd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2016)*, pages 87–96, San Francisco, California.
14. Feng, X., Wu, S., **Zhou, W.**, and Tang, Z. (2016). Multi-hypergraph consistent sparse coding for image data clustering. In *Proceedings of the 2016 Pacific Asia Knowledge Discovery and Data Mining Conference (PAKDD 2016)*, pages 79–91, Auckland, New Zealand.
15. Wang, X., Liu, C., Liu, J., Qin, X., Wang, N., and **Zhou, W.** (2016). A cellular automata model for forest fire spreading simulation. In *Proceedings of the 2016 IEEE Symposium Series on Computational Intelligence (SSCI 2016)*, pages 1–6, Athens, Greece.
16. Guan, C., Lu, X., Li, X., Chen, E., **Zhou, W.**, and Xiong, H. (2015). Discovery of college students in financial hardship. In *Proceedings of the 2015 IEEE International Conference on Data Mining (ICDM 2015)*, pages 141–150, Atlantic City, New Jersey.
17. Wan, L., Cao, Q., and **Zhou, W.** (2015). Estimation-based profiling for code placement optimization in sensor network programs. In *Proceedings of the 2015 IEEE International Symposium on Performance Analysis of Systems and Software (ISPASS 2015)*, pages 165–166.
18. Lu, K., **Zhou, W.**, and Wang, X. (2014). Social network of the competing crowd. In *Proceedings of the 2014 International Conference on Behavioral, Economic, and Socio-Cultural Computing (BESC 2014)*, pages 13–19, Shanghai, China.
19. Wan, L., Wang, Z., Lu, Z., Qi, H., **Zhou, W.**, and Cao, Q. (2014). Towards approximate spatial queries for large-scale vehicle networks. In *Proceedings of the 22nd ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (GIS 2014)*, pages 505–508, Dallas, Texas.
20. Zhang, H., **Zhou, W.**, Reardon, C., and Parker, L. E. (2014). Simplex-based 3D spatio-temporal feature description for action recognition. In *Proceedings of the 2014 IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2014)*, pages 2067–2074.
21. Zhang, H., **Zhou, W.**, and Parker, L. E. (2014). Fuzzy segmentation and recognition of continuous human activities. In *Proceedings of the 2014 IEEE International Conference on Robotics and Automation (ICRA 2014)*, pages 6305–6312.
22. Han, X., **Zhou, W.**, Jiang, X., Song, H., and Nishida, T. (2013). Impacts of URLs position on estimating query-URL relevance. In *Proceedings of the 13th IEEE International Conference on Data Mining (ICDM 2013)*, pages 251–260.
23. **Zhou, W.** and Zhang, H. (2013). Correlation range query. In *Proceedings of the 14th International Conference on Web-Age Information Management (WAIM 2013)*, pages 490–501. **Best Paper Award.**

24. **Zhou**, W., Jin, H., and Liu, Y. (2012). Community discovery and profiling with social messages. In *Proceedings of the 18th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2012)*, pages 388–396.
25. Luo, C., Xiong, H., **Zhou**, W., Guo, Y., and Deng, G. (2011). Enhancing investment decision in P2P lending: An investor composition perspective. In *Proceedings of the 17th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2011)*, pages 292–300.
26. **Zhou**, W., Xiao, K., and Song, F. (2011). Dynamic rank correlation computing for financial risk analysis. In *Proceedings of the International Conference on Knowledge Science, Engineering and Management (KSEM 2011)*, pages 269–280.
27. **Zhou**, W., Xiong, H., Ge, Y., Yu, J., Ozdemir, H., and Lee, K. (2010). Direction clustering for characterizing movement patterns. In *Proceedings of the 2010 IEEE International Conference on Information Reuse and Integration (IRI 2010)*, pages 165–170.
28. **Zhou**, W. and Xiong, H. (2009). Efficient discovery of confounders in large data sets. In *Proceedings of the 9th IEEE International Conference on Data Mining (ICDM 2009)*, pages 647–656.
29. Ge, Y., Xiong, H., **Zhou**, W., Sahoo, R. K., Gao, X., and Wu, W. (2009). Multi-focal learning and its application to customer service support. In *Proceedings of the 15th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2009)*, pages 349–358.
30. **Zhou**, W. and Xiong, H. (2008). Volatile correlation computation: a checkpoint view. In *Proceedings of the 14th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2008)*, pages 848–856. **Best Student Paper Runner-Up.**
31. Hu, T., Xiong, H., **Zhou**, W., Sung, S. Y., and Luo, H. (2008). Hypergraph partitioning for document clustering: A unified clique perspective. In *Proceedings of the 31st ACM SIGIR International Conference on Research and Development in Information Retrieval (SIGIR 2008)*, pages 871–872.
32. Wu, J., Xiong, H., Chen, J., and **Zhou**, W. (2007). A generalization of proximity functions for k-means. In *Proceedings of the 2007 IEEE International Conference on Data Mining (ICDM 2007)*, pages 361–370.
33. Hu, T., Qu, C., Tan, C. L., Sung, S. Y., and **Zhou**, W. (2006). Preserving patterns in bipartite graph partitioning. In *Proceedings of the 18th IEEE International Conference on Tools with Artificial Intelligence (ICTAI 2006)*, pages 489–496. **Best Paper Runner-Up.**

Contributions to Edited Volumes - Book Chapters

- Edirisinghe, C. and **Zhou**, W. (2014). Portfolio optimization using rank correlation. In Wang, J., editor, *Encyclopedia of Business Analytics and Optimization*, pages 1866–1879. IGI Global, Hershey, PA. This title was featured at the *ALA Annual Conference and Exhibition* in San Francisco, California in 2015.
- Xiong, H., Steinbach, M., Kumar, V., and **Zhou**, W. (2009). Pattern preserving clustering. In Wang, J., editor, *Encyclopedia of Data Warehousing and Mining*, pages 1505–1510. Idea Group Inc., Hershey NY.
- Xiong, H., Tan, P.-N., Kumar, V., and **Zhou**, W. (2007). Hyperclique pattern discovery: A summary of results. In Masegla, F., Poncelet, P., and Teisseire, M., editors, *Data Mining Patterns: New Methods and Applications*, pages 57–84. Idea Group Inc., Hershey PA.

Public Archives

- Gao, X., Wu, S., and **Zhou**, W. (2022). NECA: Network-embedded deep representation learning for categorical data. *arXiv* 2205.12752. URL: <http://arxiv.org/abs/2205.12752>.
- Feng, Y. and **Zhou**, W. (2021). Seed stocking via multi-task learning. *arXiv* 2101.04333. URL: <https://arxiv.org/abs/2101.04333>.
- Feng, Y. and **Zhou**, W. (2020). Is working from home the new norm? An observational study based on a large geo-tagged COVID-19 Twitter dataset. *arXiv* 2006.08581. URL: <https://arxiv.org/abs/2006.08581>.

Reports

Zhou, W., Roy, T. D., and Skrypnik, I. (2020). The KDD Cup 2019 report [PDF]. *ACM SIGKDD Explorations Newsletter*, 22(1):1–10. <https://dl.acm.org/doi/10.1145/3400051.3400056>.

Zhou, W., Renso, C., Bogorny, V., and Xiong, H. (2012). Modeling tools for extracting useful knowledge and decision making. *International Journal of Knowledge and Systems Science (IJKSS)*, 3(1).

Patent

Jin, H., Liu, Y., and **Zhou**, W. (2014). Community profiling for social media. US Patent No.: US 8,738,628 B2. Full text: <http://www.google.com/patents/US8738628>.

Media Mentions

“Algorithm reveals which new emoji Twitter users most desire,” *The Next Web*. <https://tinyurl.com/y35b4map>. (July 31, 2020)

“Why Isn’t There a Sarcasm Emoji?” *Haslam College of Business*: <https://bit.ly/30dulS6>, *PR Newswire* story reprinted in various media, including *Yahoo! Finance*, *Business Insider*, and *Financial Times* (July 30, 2020)

“KDD Cup 2019 Teams Tap Advanced Data Science to Tackle Challenges in Multimodal Transportation, Malaria in Sub-Saharan Africa and Binary Data Classification,” *PR Newswire*: <https://prn.to/2KzFwg> (July 24, 2019)

“Ride-Sharing Linked to Socializing, Cost Savings,” *Haslam College of Business*: <https://bit.ly/2Xb1eeQ> (February 5, 2019)

“Cutpurse Capers,” *The Economist*: <http://econ.st/2bf0lgg> (August 18, 2016)

COURSES TAUGHT

Advanced Topics in Data Mining (Doctoral Level, UTK)

Text Mining (Master’s Level, UTK)

Multivariate and Data Mining Techniques (Master’s Level, UTK)

Data Mining Methods for Business Applications (Master’s Level, UTK)

Data Mining and Business Analytics (Undergraduate Level, UTK)

Introduction to Statistics (Undergraduate Level, UTK)

Business Research Methods (Undergraduate Level, Rutgers University)

PROFESSIONAL ACTIVITIES

Journal Editorial

Guest Editor, *Int’l Journal of Knowledge and Systems Science*, Special Issue on Modeling Tools for Extracting Useful Knowledge and Decision Making, Volume 3, Issue 1 (2012)

Review Experience

National Science Foundation (NSF) Panels: 2015, 2017–2020

Journal Paper Review: ACM Transactions on Intelligent Systems and Technology (TIST), ACM Transactions on Management Information Systems (TMIS), ACM Transactions on Knowledge Discovery from Data (TKDD), Decision Sciences, Electronic Commerce Research, Expert Systems with Applications, European Journal of Operational Research (EJOR), IEEE Intelligent Systems, IEEE Transactions on Big Data, IEEE Transactions on Knowledge and Data Engineering (TKDE), IEEE Transactions on Systems, Man and Cybernetics: Systems, Information & Management, Information Processing & Management, Information Sciences, Information Systems Management, Information Systems Research

(ISR), INFORMS Journal on Computing (JOC), INFORMS Journal on Data Science (IJDS), Journal of Applied Statistics, Journal of Cleaner Production, Journal of Network and Computer Applications, Knowledge and Information System (KAIS), Knowledge-Based Systems (KBS), Management Science, MIS Quarterly (MISQ), Neurocomputing, Pattern Recognition Letters, Production and Operations Management (POM)

Conference Organization

Area Chair, Research Track of KDD 2023
 Post Conference Discussion Facilitator, SNEB 2022 Annual Conference
 Senior Program Committee Member, Research Track, KDD 2022
 Senior Program Committee Member, Applied Data Science Track, KDD 2021-2022
 Conference Co-Chair, INFORMS Data Science Workshop, 2021
 Program Co-Chair, Workshop on Information Technologies and Systems (WITS), 2021
 Program Co-Chair, INFORMS Data Science Workshop, 2020
 Associate Editor, Blockchain, Fintech and Emerging Technologies Track, PACIS 2020
 Cluster Chair, INFORMS AI Cluster, 2019–2020
 Co-Chair of KDD Cup, 2019
 Session Chair, Big Data Analytics, INFORMS Annual Meeting, 2017
 Associate Editor, Data Science and Business Analytics Track, ICIS 2016
 Session Chair, Supervised and Unsupervised Methods, INFORMS Annual Meeting, 2016
 Publicity Co-Chair and Session Chair, ICDM, 2015
 Publicity Co-Chair, WAIM, 2013-14
 Publicity Co-Chair, WI-IAT, 2013

Conference Program Committee Members

Workshop on Information Technologies and Systems (WITS), 2018–19, 2023
 IEEE Int'l Conf. on Data Mining (ICDM), 2013–18, 2020, 2022-2023
 Data Science in Ecommerce/Retail Workshop at SDM, 2020
 Proposal review for NeuroIPS Competitions, 2019
 INFORMS Workshop on Data Science, 2017–19
 ACM SIGKDD Int'l Conf. on Knowledge Discovery and Data Mining (KDD), 2012, 2014–21
 ACM Int'l Conf. on Information and Knowledge Management (CIKM), 2013, 2019
 Conf. on Information Systems and Technology (CIST), 2018
 Int'l Conf. on Information Systems (ICIS) Data Science and Predictive Analytics, 2018
 Int'l Workshop on Organizational Behavior and Talent Analytics at KDD'18
 Data Science for Human Capital Management Workshop at ICDM'17 and ECML-PKDD'18
 SIAM Int'l Conf. on Data Mining (SDM), 2015–16
 Int'l Joint Conf. on Artificial Intelligence (IJCAI), 2016
 Hawaii Int'l Conf. on System Sciences (HICSS), 2017
 Int'l Conf. on Web-Age Information Management (WAIM), 2013–15
 Pacific-Asia Conf. on Knowledge Discovery and Data Mining (PAKDD), 2013–15
 ACM Int'l Conf. on Web Search and Data Mining (WSDM), 2015
 Int'l Conf. on Advances in Social Networks Analysis and Mining (ASONAM), 2015
 Int'l Conf. on Big Data Computing and Communications (BIGCOM), 2015
 Int'l Conf. on Knowledge, Science, Engineering and Management (KSEM), 2011–14
 Int'l Conf. on Behavioral, Economic, and Socio-Cultural Computing (BESC), 2014
 IEEE Int'l Conf. on Social Computing and Networking (SocialCom), 2014
 Int'l Conf. on Social Computing and Its Applications (SCA), 2011–12

Professional Membership and Leadership

President, INFORMS College on Artificial Intelligence, 2023-present

Secretary, INFORMS College on Artificial Intelligence, 2021-2022

Senior Member, ACM and SIGKDD

Senior Member, IEEE

Member, INFORMS

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