

SELECTIVE PUBLICATIONS (more than 16,000 citations ([Dongsong Zhang, Belk Endowed Chair Professor - Google Scholar](#)))

Refereed Journal Articles

- Yu, L., Gong, W., Zhang, D., Ding, Y., and Fu, Zhe (2024). From Interaction to Prediction: A Multi-Interactive Attention based Approach to Product Rating Prediction. *Inform Journal on Computing*. Forthcoming
- Peng, F., Zhang, D., Yan, Z. (2024). Digital Phenotyping-based Depression Detection in the Presence of Comorbidity: An Uncertainty Reasoning Approach. *Journal of Management Information Systems*. Forthcoming.
- Yu, L., Xing, W., and Zhang, D. (2024). Live Streaming Channel Recommendation Based on Viewers' Interaction Behavior: A Hypergraph Approach. Forthcoming in *Decision Support Systems*.
- Zhang, D., Zhou, L., Tao, J., Zhu, T., and Gao, G. (2024). KETCH: A Knowledge-Enhanced Transformer-based Approach to Suicidal Ideation Detection from Social Media Content. *Information Systems Research (ISR)*.
<https://pubsonline.informs.org/doi/10.1287/isre.2021.0619>
- Kanlun Wang, Zhou, L., Lai, J., and Zhang, D. (2023). A Comparison of a Touch-Gesture- and a Keystroke-Based Password Method: Toward Shoulder-Surfing Resistant Mobile User Authentication. *IEEE Transactions on Human-Machine Systems*. 53(2), p.303-314.
- Yu, L., Zhang, D. (2023). Collaborative Group Embedding and Decision Aggregation Based on Attentive Influence of Individual Members: A Group Recommendation Perspective. *Decision Support Systems*. Vol. 165.
- Wu, D., Lowry, P., Zhang, D., Tao, Y. (2022). Patient Trust in Physicians Matters: A Field Study on Understanding the Role of Mobile Patient Education System and Patient-Physician Communication in Improving Patient Adherence Behavior. *Journal of Medical Internet Research*. Dec 20, 2022. 24(12): e42941. doi: 10.2196/42941
- Zhang, D., Lim, J., Zhou, L., and Dahl, A. (2021). Breaking the Data Value-Privacy Paradox in Mobile Mental Health Systems: Toward User-Centered Privacy Protection. *JMIR Mental Health*. 8(12), e31633. doi: 10.2196/31633
- Shan, G., Zhou, L., and Zhang, D. (2021). From Conflicts and Confusion to Doubts: Examining Review Inconsistency for Fake Review Detection. *Decision Support Systems*. 144.
- Dash, A., Zhang, D., & Zhou, L. (2021). Personalized Ranking of Online Reviews Based on Consumer Preferences in Product Features. *International Journal of Electronic Commerce*. 25(1), 29-50
- Yu, L., Xiong, J., Zhang, D. (2021) DNCP: An Attention-based Deep Learning Approach Enhanced with Attractiveness and Timeliness of News for Online News Click Prediction. *Information & Management*. 58(2)

- Yu, L., Zhang, D., Fu, Zhe (2021). CE-DIFF: An Approach to Identifying and Coping with Irregular Ratings in Collaborative Decision Making. *Decision Sciences*. 52(6), 1432-1451
- Shan, J., Zhou, L., Zhang, D. (2020). What reveals about depression level? The role of multimodal features at the level of interview questions. *Information & Management*. 57(7).
- Lai, J., Zhang, D., Wang, S., Kilic, D. Y., Zhou, L. (2019). ThumbStroke: A Virtual Keyboard in Support of Sight-Free and One-Handed Text Entry on Touch-Screen Mobile Devices. *ACM Transactions on Management Information Systems*. September issue. Article #11.
- Zhou, Y., Zhang, Y., Zhang, D., and Song, W. (2019). Improving Stroke Risk Detection Using a Hybrid Feature Selection Method. *Journal of Medical Internet Research (JMIR)*. 21(4): e12437. DOI: 10.2196/12437
- Grover, V., Chiang, R., Liang, T., and Zhang, D. (2018). Creating strategic business value from big data analytics: a research framework. *Journal of Management Information Systems*. 35(2), 388-423.
- Zhang, D., Zhou, L., Uchidiuno, J., and Kilic, I. (2017). Personalized Assistive Web for Improving Mobile Web Browsing and Accessibility for Visually Impaired Users. *ACM Transactions on Accessible Computing*. 10(2), article 6.
- Zhang, D., Zhou, L., Kehoe, L. J., and Kilic, I. (2016). What Online Reviewer Behaviors Really Matter? A Study of Effects of Verbal and Nonverbal Behaviors on Online Fake Review Detection. *Journal of Management Information Systems*. 33(2). p.456-481
- Zhou, L., Kang, Y., Zhang, D. and Lai, J. (2016). Harmonized Thumb Stroke Based User Authentication for Touch-screen Mobile Phones. *Decision Support Systems*. 92,14-24.
- Yan, Z., Xing, M., Zhang, D., and Ma, B. (2015). EXPRS: An Extended PageRank Method for Product Feature Extraction from Online Consumer Reviews. *Information & Management*. 52, 850-858.
- Lai, J. and Zhang, D. (2015). ExtendedThumb: A Target Acquisition Approach for One-Handed Interaction With Touch-Screen Mobile Phones. *IEEE Transactions on Human-Machine Systems*. June 2015, p.362-370.
- Zhang, D., Yan, Z., Jiang, H., and Kim, T. (2014). A Domain-Feature Enhanced Classification Model for Detection of Phishing E-Business Websites. *Information & Management*. 51(7), 845-853.
- Zhou, L., Wu, J., & Zhang, D. (2014). Discourse Features of Deception Behavior in the Case of Multiple Receivers. *Information & Management*. 51(6): 726-737.
- Zhou, L. and Zhang, D. (2012). Automatic Deception Detection in Computer-Mediated Communication. *IEEE Intelligent Systems*. Nov./Dec., p. 73-75.
- Adipat, B., Zhang, D. & Zhou, L. (2011). The Effects of Tree-View Based Presentation Adaptation on Mobile Web Browsing. *MIS Quarterly*. 35(1), p.99- 121.
- Koru, A. G, Zhang, D., Emam, K.E., & Liu, H (2009). An Investigation into the Functional Form of the Size-Defect Relationship for Software Modules. *IEEE Transactions on Software Engineering (TSE)*. March/April, 35(2), pp. 293-304.

- Zhou, L., Shi, Y, and Zhang, D. (2008). A Statistical Language Modeling Approach to Online Deception Detection. *IEEE Transactions on Knowledge and Data Engineering (TKDE)*. 20(8): pp.1077-1081
- Zhou, L. & Zhang, D. (2008). Following Linguistic Footprints: Automatic Deception Detection in Online Communication. *Communications of the ACM (CACM)*. 51(9), pp. 119-122.
- Zhang, D., P.B. Lowry, L. Zhou, and X. Fu (2007). The Impact of Individualism-collectivism, social presence, and group diversity on group decision making under majority influence, *Journal of Management Information Systems (JMIS)*. 23(4), pp. 53-80.
- Zhou, L. & Zhang, D. (2007). An Ontology-supported Misinformation Model: Toward a digital misinformation library. *IEEE Transactions on Systems, Man, and Cybernetics (Part A)*. 37(5), Sept. 2007. pp. 804-813.
- Zhang, D. (2007). Web Content Adaptation for Mobile Handheld Devices. *Communications of the ACM (CACM)*. February 2007, 50(2), pp. 75-79.
- Zhou, L. & Zhang, D. (2007). Typing or Messaging? Modality Effect on Deception Detection in Computer-mediated Communication. *Decision Support Systems*. 44, pp.188-201.
- Chen, M., Zhang, D. & Zhou, L. (2007). Empowering Collaborative Commerce with Web Services Enabled Business Process Management Systems. *Decision Support Systems*. Special issue on Emerging Issues in Collaborative Commerce. 43, pp.530-546.
- Zhou, L., Shi, Y., Zhang, D. & Sears, A. (2006). Discovering Cues to Error Detection in Speech Recognition Output: A User-Centered Approach. *Journal of Management Information Systems (JMIS)*. 22(4), pp.237-270.
- Zhang, D, Zhou, L., Briggs, B. & Nunamaker, J. F. (2006). Instructional Video In E-learning: Assessing the Impact of Interactive Video on Learning Effectiveness. *Information & Management*. 43(1), pp. 15-27.
- Chiang, W. Y., Zhang, D., Zhou, L. (2006). Predicting and Explaining Patronage Behavior toward Web and Traditional Stores Using Neural Networks: A Comparative Analysis with Logistic Regression. *Decision Support Systems*. 41(2), pp. 514-531.
- Zhou, L. and Zhang, D. (2005). A Heuristic Approach to Establishing Punctuation Convention in Instant Messaging. *IEEE Transactions on Professional Communication*. Vol. 48, No. 4, pp. 391-400.
- Zhang, D. & Zhou, L (2004). Discovering Golden Nuggets: Data Mining in Financial Applications. *IEEE Transactions on Systems, Man, and Cybernetics: Part C*. 34(4), 513-522
- Zhang, D. & Nunamaker, J. (2004). A Natural Language Approach to Content-Based Video Indexing and Retrieval for Interactive E-Learning. *IEEE Transactions on Multimedia*. 6(3), pp. 450-458.
- Zhang, D., Zhao, J. L., Zhou, L. & Nunamaker, J. (2004). Can E-Learning Replace Traditional Classroom Learning? — Evidence and Implication of the Evolving E-Learning Technology. *Communications of the ACM*. 47(5), pp.75- 79.

Refereed Conference Articles

- Zhe, F., Wang, K., Wang, J., Zhou, L., Chen, S., Janies, D., and Zhang, D. (2024). Detecting Misinformation in Multimedia Content through Cross-Modal Entity Consistency: A Dual Learning Approach. Pacific-Asia Conference on Information Systems. Proceedings of Pacific-Asia Conference on Information Systems (PACIS 2024). Ho Chi Minh City, Vietnam. July 1-5, 2024. **The Winner of the PACIS 2024's Best Completed Research Paper Award and the Best Paper Award in the Digital Security, Privacy, Ethics, and Resilience Track.**
- Zhou, L., Lim, J., and Zhang, D. (2024). The Effects of Email Legitimacy and Phishing Behavior Training on Eye Movement Behavior in Spear Phishing Detection. *HICSS-57*, Jan. 3-6, 2024. Waikiki, HI, USA
- Wang, K., Zhou, L., Zhang, D., and Lai, J. (2023). Shoulder Surfing on Mobile Authentication: Perceptions vis-a-vis Performance from Attackers. Proceedings of the 2023 *IEEE International Conference on Intelligence and Security Informatics* (IEEE ISI 2023). Charlotte, NC, USA. Oct. 2-3, 2023
- Zhou, L., Zhang, D., and Liu, Z. (2023). A stage model for understanding phishing victimization behavior in embedded training. Proceedings of the 2023 *IEEE International Conference on Intelligence and Security Informatics (IEEE ISI 2023)*. Charlotte, NC, USA. Oct. 2-3, 2023
- Aldossari, M. and Zhang, D. (2023). D&L: A Natural Language Processing Based Approach for Protecting Sensitive Information from Shoulder Surfing Attacks. *AMCIS 2023*. Panama City, Panama. Aug. 10-12, 2023. **Nominated for the best paper award.**
- Lai, J., Zhou, L., Wang, K., and Zhang, D. (2022). From Small to Big: Smartwatch Use in Mitigating COVID-19 — understanding user experience from social media content analysis. Hawaii International Conference on Systems Sciences (HICSS), January 3-7, 2022. HI, USA.
- Fowler, S., Stylianou, A., Mousavi, R., Reid, S., and Zhang, D. (2020). Detecting violent crime with gang social media postings. Proceedings of the Forty-First International Conference on Information Systems (ICIS 2020), India 2020
- Kanlun Wang, Lina Zhou, Dongsong Zhang, Zhihui Liu and Jaewan Lim (2020). What is More Important for Touch Dynamics based Mobile User Authentication. Proceedings of The Pacific Asia Conference on Information Systems (PACIS). June 20-24, 2020. Dubai, UAE
- Fowler, S., Stylianou, A., Zhang, D., Reid, S., and Mousavi, R., (2019). Predicting Violent Crime with Gang Social Media Postings. International Conference on Information Systems (ICIS 2019). Dec. 15-18, 2019. Munich, Germany
- Wang, K., Zhou, L., and Zhang, D. (2019). Making Smartphones More Secure and Usable: An Exploratory Study on User Preferences and Situational Needs of Mobile User Authentication Methods. The 17th IEEE International Conference on Intelligence and Security Informatics (IEEE ISI 2019). Shenzhen, Guangdong, China. July 1-3, 2019. **Best paper runner up.**
- Lai, J., Zhang, D., Wang, S., Yakut, I., Zhou, L. (2018). A Stroke-based Virtual Keyboard for Sight-Free Text Entry on Touch-Screen Mobile Devices. *HICSS-51*. Jan. 3-6, Hawaii, USA.

- Lai, J. & Zhang, D. (2014). ExtendedThumb: A Motion-Based Virtual Thumb for Improving One-Handed Target Acquisition on Touch-Screen Mobile Devices. Proceedings of ACM SIGCHI Conference on Human Factors in Computing Systems (CHI). April 27-May 1. Toronto, Canada. p.1825-1830.
- Lai, J. & Zhang, D. (2014). A Study of Direction's Impact on Single-Handed Thumb Interaction with Touch-Screen Mobile Phones. Proceedings of ACM SIGCHI Conference on Human Factors in Computing Systems (CHI). April 27- May 1. Toronto, Canada. p.2311-2316
- Jiang, H., Zhang, D., Yan, Z. (2013). A Classification Model for Detection of Chinese Phishing E-Business Websites. Proceedings of the 17th Pacific Asia Conference on Information Systems (PACIS 2013). Jeju Island, Korea, June 18- 22, 2013. **Best Paper Award Nominee**
- Li, J., Zhang, D., and Zhang, P. (2013). Supporting Dynamic Situation Awareness in Online Group Discussion and Decision Making: A Visualization Approach. Proceedings of 46 Hawaii International Conference on System Sciences (HICSS). Maui, Hawaii. Jan. 7-10, 2013.p.470-479. **Best Paper Award Nominee.**
- Liang, T. & Zhang, D. (2009). An Event-Ontology-based Approach to Constructing Episodic Knowledge from Unstructured Text Documents. International Conference on Information Systems (ICIS 2009). December 15-18, 2009. Phoenix, Arizona.