

Sen Yan

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EDUCATION

Leeds School of Business, University of Colorado, Boulder
Ph.D. Candidate in Information Systems
Co-advised by Kai R. Larsen and David Dobolyi

Boulder, CO, USA
2021 – 2026 (Expected)

Shanghai University of Finance and Economics
B.S. in Financial Management
Minor in Computer Science

Shanghai, China
2017 – 2021

RESEARCH INTEREST

Psychometric Methodology, Large Language Model Algorithms, Influencer Marketing, Generative AI Governance

TEACHING INTEREST

Python Programming, Data Analysis, Natural Language Processing, Statistic, Database

PUBLICATION

1. **Yan, S.**, Wang, Z., & Dobolyi, D. (2025). An explainable framework for assisting the detection of AI-generated textual content. *Decision Support Systems*, 114498.

WORKING PAPER

Papers under review

1. Schöbel, S., Moritz, J., **Yan, S.**, Thatcher, J., & Söllner, M. *Nudges, generative AI, and prompt engineering: A Social Cognitive Theory approach to online training* (Manuscript under review, 2nd revision invited at *MIS Quarterly*).
2. Larsen, K., **Yan, S.**, Mueller, R., Sang, L., Starzl, R., & Rönkkö, M. *Universal construct validity* (Under consideration at *New England Journal of Medicine*).
3. Shiue, C., Keller, W., & **Yan, S.** *Mining Chinese historical sources at scale: A machine learning approach to Qing state capacity* (Manuscript under review, 2nd round at *Historical Methods*; also available as NBER Working Paper).
4. Cui, X., **Yan, S.**, Ding, M., Zhu, M., & Deng, Q. *Globally automated detection of lunar maria and impact melts using deep learning* (Manuscript under review).

Papers in preparation for submission

1. **Yan, S.**, Larsen, K., & Li, J., *OntoLLM: A Holistic Ontology-Infused LLM for Behavioral Research Workflows* (Manuscript in preparation, Target: *MIS Quarterly*).
2. **Yan, S.**, Larsen, K., & Lukyanenko, R., *Integrating LLMs and psychometrics: Global construct validity* (Manuscript in preparation, Target: *MIS Quarterly*).

3. Dobolyi, D., & **Yan, S.**, *Tri-model deep learning for sponsor content detection* (Draft writing, Target: *MIS Quarterly*).
4. Chen, P., Shiue, C., Keller, W., & **Yan, S.**, *Text to data: A machine learning approach to historical Chinese documents* (Manuscript in preparation, Target: *Research Policy*).
5. Larsen, K., Mueller, R. M., Handler, A., **Yan, S.**, & Huettemann, S. *ISReCon: An ontological approach to discovering research conversations in IS* (Model development, Target: *MIS Quarterly*).

CONFERENCE PROCEEDING & PRESENTATION

1. Larsen, K. R., & **Yan, S.** (2024). *Integrating LLMs and psychometrics: Global construct validity*. Paper presented at the International Conference on Information Systems (ICIS 2024), Bangkok, Thailand.
2. Larsen, K. R., & **Yan, S.** (2024). *Integrating LLMs and psychometrics: Global construct validity*. Paper presented at the INFORMS Annual Meeting 2024, Seattle, WA.
3. Larsen, K. R., & **Yan, S.** (2024). *Is behavioral cross-sectional information systems research just linguistic manipulation?* Provocation presented at the 32nd European Conference on Information Systems (ECIS 2024), Paphos, Cyprus.
4. Shiue, C., Keller, W., & **Yan, S.** (2024). *Mining Chinese historical sources at scale: A machine learning approach to Qing state capacity*. Paper presented at the CEPR Economic History Annual Symposium 2024, Dublin, Ireland.
5. **Yan, S.**, Wang, Z., & Dobolyi, D. (2023). *A design framework for detecting and understanding AI-generated texts: Fusing transformers and linguistic features*. Paper presented at the INFORMS Annual Meeting 2023, Phoenix, AZ.
6. **Yan, S.**, Wang, Z., & Dobolyi, D. (2023). *A design framework for detecting and understanding AI-generated texts: Fusing transformers and linguistic features*. Paper presented at the INFORMS Workshop on Data Science (WDS 2023), Phoenix, AZ.
7. Mueller, R. M., Huettemann, S., Larsen, K. R., **Yan, S.**, & Handler, A. (2022). *Toward an information systems ontology*. In *Proceedings of the 17th International Conference on Design Science Research in Information Systems and Technology (DESRIST 2022)*, Tampa, FL.
8. Cui, W., & **Yan, S.** (2021). *Isotonic data augmentation for knowledge distillation*. In *Proceedings of the 30th International Joint Conference on Artificial Intelligence (IJCAI 2021)*. Virtual.
9. **Yan, S.**, Yang, B., & Hui, F. (2020). *UnitedANT: A multimodal deep learning framework for predicting financial risk from acoustic, numeric, and textual cues in earnings conference calls*. In *Proceedings of the 30th Workshop on Information Technologies and Systems (WITS 2020)*. Virtual.

TEACHING EXPERIENCE

- **Instructor**, 2025 Spring, Introduction to Python (BAIM3220) at CU Boulder
- **Instructor**, 2022 Spring, Business Analytics (BAIM3200/MKGT3201) at CU Boulder
- **Teaching Assistant**, 2021 Fall, Business Analytics (BAIM3200/MKGT3201) at CU Boulder
- **Teaching Assistant**, 2020 Fall, Natural Language Processing at Shanghai U. of Finance and Economics
- **Teaching Assistant**, 2020 Spring, Natural Language Processing at Shanghai U. of Finance and Economics

HONOR

- AMCIS 2025, Doctoral Consortium
- GPSG Travel Grant at Fall 2024 (\$500, support graduate students to attend academic conference, provided by CU Boulder)
- Summer Hart Fellowship 2023 (\$3000, support Ph.D. students to work on their research projects, provided by Leeds School of Business)
- Summer Hart Fellowship 2022 (\$3000, support Ph.D. students to work on their research projects, provided by Leeds School of Business)

- DESRIST 2022, Doctoral Consortium
- Honor Degree, Shanghai University of Finance and Economics

SKILL

- Programs: Python (master), PyTorch Framework (master), Linux Shell, Java, C++, Javascript, SQL
- Languages: Chinese (native), English (fluent)