Mingwei Sun

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ACADEMIC POSITION

Unversity of Texas at Arlington   Aug 2024 - Present
Assistant Professor

EDUCATION

University of Maryland, Smith School of Business   College Park, MD
Ph.D. in Information Systems   Aug 2018 - Jun 2024
Dissertation Committee: Kunpeng Zhang (Chair), P.K. Kannan (Co-chair), Vanessa Frias-Martinez, Jessica Clark, Lauren Rhue

Rutgers Business School   Newark, NJ
M.S. in Quantitative Finance   2016 - 2017

Nanjing University of Information Science and Technology   Nanjing, China
B.S. in Financial Engineering   2010 - 2014

RESEARCH INTERESTS & METHODOLOGIES

My research streams center around the application of deep learning to analyze large-scale unstructured data, including audio, text, and video, with the goal of improving consumer experience and enhancing business decision-making.

COMPUTER SCIENCE PUBLICATIONS

1. Mingwei Sun and Kunpeng Zhang, "Multimodal Co-attention Transformer for Video-Based Personality Understanding," 2023 IEEE International Conference on Big Data, Sorrento, Italy, 2023, pp. 1450 - 1459. (**Acceptance rate: 17.5%**)

2. Mingwei Sun and Kunpeng Zhang, "Sec2Sec Co-attention Transformer for Video Emotion Prediction," 2024 IEEE International Conference on Acoustics, Speech and Signal Processing, Seoul, Korea, 2024, pp. 8255 - 8259.

WORKING PAPERS

1. Mingwei Sun, Kunpeng Zhang, Balaji Padmanabhan and David Schweidel, "A Multimodal Framework for Video-Based Apparent Personality Understanding".
Major Revision at **Information Systems Research**

2. Mingwei Sun, Bingze Xu and Kunpeng Zhang, "MAPO: Multi-Agent-based Prompt Optimization for Text-to-Image Alignment".
To be submitted to Management Information Systems Quarterly

3. Mingwei Sun, Balaji Padmanabhan and Kunpeng Zhang, "Personalizing LLMs for Email Generation Using Mixture-of-Experts".
To be submitted to Management Science

4. Jiding Zhang, Chewei Liu, Xiaowei Liu, Mingwei Sun and Jiang Duan, "Signals of Effort or Evidence of Automation? The Counter-Signaling Effect of Prompt Disclosure".
To be submitted to Management Science

CONFERENCE PRESENTATIONS AND INVITED TALKS

1. "Multimodal Co-attention Transformer for Video-Based Personality Understanding," INFORMS Annual Meeting, Seattle, WA, 2024. (With Kunpeng Zhang)

2. "Multimodal Co-attention Transformer for Video-Based Personality Understanding," 2023 IEEE International Conference on Big Data, Sorrento, Italy, 2023, **Student Travel Award**. (With Kunpeng Zhang)

3. "The Use of Generative AI in Digital Marketing: A Randomized Field Experiment on Restaurant Promotion", The 33rd Workshop on Information Technology and Systems (WITS), Hyderabad, India, Dec 2023. (With Lauren Rhue, Kunpeng Zhang and P.K. Kannan)

4. "Multimodal Co-attention Transformer for Video-Based Personality Understanding", The 33rd Workshop on Information Technology and Systems (WITS), Hyderabad, India, Dec 2023. (With Kunpeng Zhang)

5. "Sec2Sec Co-attention Transformer for Video Affective Prediction", INFORMS Annual Meeting, Phoenix, AZ, Oct 2023. (With Kunpeng Zhang)

6. "Sec2Sec Co-attention Transformer for Video Affective Prediction", INFORMS Workshop on Data Science, Phoenix, AZ, Oct 2023, **Student Scholarship**. (With Kunpeng Zhang)

7. "An Interpretable Sec2Sec Co-attention Transformer for Video Affective Prediction", Symposium on Statistical Challenges in Electronic Commerce Research (SCECR), Bogota, Columbia, Jun 2023. (with Kunpeng Zhang)

8. "A Network Learning Method for Peer Firm Identification via Wisdom of Crowds", Symposium on Statistical Challenges in Electronic Commerce Research (SCECR), Bogota, Columbia, Jun 2023. (with Bingze Xu and Kunpeng Zhang)

9. "Sec2Sec Co-Attention Transformer for Video Emotion Prediction", The 32nd Workshop on Information Technology and Systems (WITS), Copenhagen, Denmark, Dec 2022, **Best Student Paper Runner-up Award**. (with Kunpeng Zhang)

10. "Man vs. Machine: The Wisdom of AI Compared to the Wisdom of Experts in Evaluating Initial Coin Offerings (ICOs)", Conference on Information Systems and Technology (CIST), Newport Beach, CA, Oct 2021. (with Lauren Rhue)

11. "Adjustable Multi-Source Bayesian Learning for Audience Estimation", Invited Industry Talk at AT&T Labs Thoughts and Technical Talks (TnTT), Aug 2021.

12. "Fraud Detection in Initial Coin Offerings Using Video Emotions", Symposium on Statistical Challenges in Electronic Commerce Research (SCECR), Virtual, Jun 2021. (with Lauren Rhue and Kunpeng Zhang)

13. "Adjustable Multi-Source Bayesian Learning for Audience Estimation", The 30th Workshop on Information Technology and Systems (WITS), Virtual, Dec 2020. (with Jessica Clark and Jean-Francois Paiement)

14. "Man vs. Machine: The Wisdom of AI Compared to the Wisdom of Experts in Evaluating Initial Coin Offerings (ICOs)", Symposium on Statistical Challenges in Electronic Commerce Research (SCECR), Virtual, Jun 2020. (with Lauren Rhue)

AWARDS AND GRANTS

- **COB Research Grant**, $10000, University of Texas at Arlington, 2025
- **Outstanding Research Assistant**, University of Maryland, 2023 - 2024
- **Student Travel Award**, IEEE Big Data, 2023
- **Student Scholarship**, INFORMS Workshop on Data Science, 2023
- **FDA-CERSI Fellowship**, 2023-2024
- **Jacob K. Goldhaber Travel Grant Award**, University of Maryland, 2023
- **Best Student Paper Runner-Up Award**, Workshop on Information Technologies and Systems (WITS), Copenhagen, Demark, Dec 2022
- **Outstanding Research Assistant**, University of Maryland, 2021 - 2022
- **Faculty-Student Research Award** (FSRA), $10000, University of Maryland, 2021 - 2022
- **University Assistantship**, University of Maryland, 2019 - 2023
- **Master of Quantitative Finance Merit Scholarship**, Rutgers Business School, Newark, NJ, 2016 - 2017

TEACHING EXPERIENCE

Instructor
- INSY 5339: Principles of Data Mining, University of Texas at Arlington, TX, Srping 2025 (Teaching Evaluation: 4.59/5)
- INSY 5336: Python Programming, University of Texas at Arlington, TX, Fall 2024 (Teaching Evaluation: 4.90/5)
- BMGT 402: Database Systems, University of Maryland, MD, Fall 2021

Teaching Assistant
- Teaching Assistant of Big Data, University of Maryland, Fall 2020
- Teaching Assistant of Big Data, University of Maryland, Spring 2019
- Teaching Assistant of Financial Time Series, Rutgers Business School, Fall 2017

- Teaching Assistant of Data Mining Course, Rutgers Business School, Fall 2017

- Teaching Assistant of Analysis of Fixed Income, Rutgers Business School, Spring 2017

ACADEMIC SERVICE

Journal Reviewer
- Management Information Systems Quarterly (MISQ)

- Production and Operations Management (POMS)

- ACM Transactions on Management Information Systems (TMIS)

Committee Member
- International Conference on Computational Linguistics (COLING), 2025

Conference Reviewer
- Conference on Knowledge Discovery and Data Mining (KDD), 2022

- Workshop on Information Technologies and Systems (WITS), 2022

- IEEE International Conference on Information Systems (ICIS), 2020, 2021, 2023

- Annual Meeting of the Association for Computational Linguistics (ACL), 2020, 2023

- Conference on Information Systems and Technology (CIST), 2023

SKILLS

- **Programming Skills: Python**, **Linux Command Line**, **Hadoop**, **Hive**, **Spark**, **R**, **SQL**, **C++**, **LaTeX**

INDUSTRY EXPERIENCE

AT&T Labs	San Francisco and San Ramon, CA
Machine Learning Intern, Technical Development Program	Jun 2021 - Aug 2021
Research Intern	Jun 2019 - Aug 2019
WhitePark Capital	New York, NY
Data Scientist	Jan 2018 - Jul 2018