LINGYAO (IVY) YUAN

Debbie & Jerry Ivy College of Business   Iowa State University
3348 Gerdin Business Building, 2167 Union Dr., Ames, IA 50011-2027
Phone: (515)294-7228   Email: lyuan@iastate.edu   ORCID: 0000-0001-9863-3137

EMPLOYMENT

Kingland Graduate Director of Business Analytics	**2023-present**
Associate Professor	**2023-present**
Assistant Professor	**2015 - 2023**

Department of Information Systems & Business Analytics
Debbie & Jerry Ivy College of Business
Iowa State University, Ames, IA USA

EDUCATION

PhD   Kelley School of Business   **August 2015**
Indiana University Bloomington, IN, USA
Field: Information Systems

MS   College of Computing & Informatics,   **May 2011**
University of North Carolina Charlotte, NC, USA
Concentration: Information Security and Privacy
Graduate Certificate in Management of Information Technology
Graduate Certificate in Information Security and Privacy

BS   School of Information Technology & Management   **July 2009**
University of International Business and Economics, Beijing, China
Major: Information Management and Systems

PUBLICATIONS

1. **Yuan, L.** & Dennis, A. R., "Selling myself: Anthropomorphic products in electronic commerce." *Decision Support Systems, forthcoming.*

2. Seymour, M., Riemer, K., Dennis, A. R., & **Yuan, L.**, "Beyond Deep Fakes: Conceptual Framework, Applications, and Research Agenda for Neural Rendering of Realistic Digital Faces." *Communications of the ACM, Oct 2023, 66(10)*, 56-57.

3. Seymour, M., Lovallo, Dan, Riemer, K., Dennis, A. R., and **Yuan, L.,** "AI with a Human Face; the case for-and against digital employees." March-April 2023, *Harvard Business Review*.

4. Paul, S., **Yuan, L.,** Jain, H. K., Robert, L. P., Spohrer, J., & Lifshitz-Assaf, H. (2022). Intelligence Augmentation: Human Factors in AI and Future of Work. *AIS Transactions on Human-Computer Interaction, 14*(3), 426-445. DOI: 10.17705/1thci.00174

5. George, J. F., Chen, R., & **Yuan, L**. (2021). "Intent to Purchase IoT Home Security Devices: Fear vs Privacy." *PLoS one*, 16.9: e0257601.

6. Zhou, L., Paul, S., Demirkan, H., **Yuan, L**., Spohrer, J., Zhou, M., & Basu, J. (2021). "Intelligence Augmentation: Towards Building Human-Machine Symbiotic Relationship." *AIS Transactions on Human-Computer Interaction*, 13(2), pp. 243-264. DOI: 10.17705/1thci.00149.

7. Seymour, M., **Yuan, L**., Dennis, A. R., & Riemer, K. (2021). "Have We Crossed the Uncanny Valley? Understanding Affinity, Trustworthiness, and Preference for Realistic Digital Humans in Immersive Environments." *Journal of the Association for Information Systems*, 22(3), 9.

8. Dennis, A. R., **Yuan, L**., Feng, X., Webb, E. M., & Hsieh, C. J. (2020). "Digital Nudging: Numeric and Semantic Priming in E-Commerce." *Journal of Management Information Systems*. 37.1: 39-65.

9. **Yuan, L**., & Dennis, A. R. (2019). "Acting Like Humans? Anthropomorphism and Consumer's Willingness to Pay in Electronic Commerce." *Journal of Management Information Systems*. 36.2: 450-477.

10. Sul, H., Dennis, A. R., & **Yuan, L**. (2017). "Trading on Twitter: Using Social Media Sentiment to Predict Stock Returns." *Decision Sciences*, 48.3: 454-488
    *Decision Sciences' Top 20 Most Downloaded Recent Papers between 2016-2017
    *Decision Sciences' Top Cited Paper between 2017-2018

11. **Yuan, L**. & Dennis, A. R., (2016) "The Happiness Premium: The Impact of Emotion on Individuals' Willingness to Pay in Online Auctions," *AIS Transactions on Human-Computer Interaction*. (8) 3, pp. 74-87.

12. Bartelt, V. L., Dennis, A. R., **Yuan, L**., & Barlow, J. B. (2013), "Individual Priming in Virtual Team Decision-Making," *Group Decision and Negotiation*, 22:5, 873-896.

RESEARCH IN PROGRESS

1. Seymour, M., **Yuan, L.,** Dennis, A. R., & Riemer, K., "Understanding Psychophysiological Responses Towards Realistic Virtual Humans in Mixed Realities." Under 3rd round review at *Information Systems Research*.

2. **Yuan, L.** & Dennis, A. R., "You are What You See: Visual Attention as a Theoretical Mechanism Underlying Digital Nudging." Under review at *Information Systems Journal*.

3. **Yuan, L.,** Dennis, A. R., Sun, T., & Zhou, M., "Two Sides of the Same Coin: User Perceptions of Chatbot and Survey Personality Assessments." Under review at *Computers in Human Behavior Artificial Intelligence*.

4. Minas, R. K., Samuel, B., **Yuan, L.**, & Khatri, V., "Exploring the Process of Query Debugging: Insights from Eye Tracking." Currently in the writing stage targeting *Information Systems Journal*.

5. Dennis, A. S., **Yuan, L.**, & Wei, W., "Personality Impact on Employee Attitude Towards Performance-based Remote Work Policy in China." Under Review at *MIS Quarterly*.

6. Kim, A., **Yuan, L.**, Seymour, M., & Dennis, A. R., "Interacting with a Celebrity Digitally: The Effect of Delivering Public Health Announcements Using a Digital Human." Under review at *Information Systems Research*.

7. **Yuan, L.**, Kim, A., Seymour, M., & Dennis, A. R., "Celebrity at Your Service: The Effect of Providing Customer Service Using a Digital Human." Under Review at *MIS Quarterly*.

8. Dennis, A. R., Seymour, M., **Yuan, L.**, Lazarine, B., Sun, X., & Yuan, A., "Exploring Perceptions Towards Digital Human Assistants of Different Roles in Virtual Meetings with Diverse Group Members." Currently in the writing stage targeting *MIS Quarterly*.

9. **Yuan, L.** & Barlow, J. B., "Sensitive to the Digital Touch? Exploring Sensory Processing Sensitivity and Its Impact on Anthropomorphized Products in E-Commerce." Currently in the writing stage targeting *Information & Management*.

10. Seymour, M., **Yuan, L.**, Dennis, A. R., Kay, J., & Riemer, K., "Exploring the Impact of Imperfect Visual Display of Digital Humans." Currently in the writing stage targeting *Decision Support Systems*.

11. **Yuan, L.**, Zhang, W., & Scheibe, K., "Using Natural Language Processing to Measure Highly Sensitive Traits." Currently in the data collection stage.

12. Seymour, M., Kim, A., **Yuan, L.**, Dennis, A. R., & Riemer, K., "Understand Individual Responses to Digital Human Financial Advisor in Different Demographic Groups." Currently in the conceptualization stage.

CONFERENCE PROCEEDINGS

1. **Yuan, L**., Zhang, W., & Scheibe, K., "The Devil is in The Details: Measuring Sensory Processing Sensitivity Using Natural Language Processing", *Proceedings of the 55th Hawaii International Conference on System Science (HICSS)*. 2022. Virtual.

2. Seymour, M., **Yuan, L**., Riemer, K., & Dennis, A. R., "Face It, Users Don't Care: Affinity and Trustworthiness of Imperfect Digital Humans." *Proceedings of the 55th Hawaii International Conference on System Science (HICSS)*. 2022. Virtual.

3. **Yuan, L**. & Barlow, J. B., "Sensitive to the Digital Touch? Exploring Sensory Processing Sensitivity and Its Impact on Anthropomorphized Products in E-Commerce", *Proceedings of the 54th Hawaii International Conference on System Science (HICSS)*, p. 4104. 2021. Virtual.

4. Seymour, M., Riemer, K., Dennis, A. R., & **Yuan, L**., "Beyond Deep Fakes: Conceptual Framework, Applications, and Research Agenda for Neural Rendering of Realistic Digital

Faces." *Proceedings of the 54th Hawaii International Conference on System Science (HICSS),* p. 4859. 2021. Virtual.

5. Seymour, M., **Yuan, L**., Dennis, A. R., & Riemer, K., "Facing the Artificial: Understanding Affinity, Trustworthiness, and Preference for More Realistic Digital Humans." *Proceedings of the 53rd Hawaii International Conference on System Science (HICSS),* 2020. Maui, HI.
    *Nominated for Best Paper Award in the Knowledge Innovation and Entrepreneurial Systems Track at HICSS 53

6. Seymour, M., **Yuan, L**., Dennis, A. R., & Riemer, K., "Crossing the Uncanny Valley? Understanding Trustworthiness towards Realistic Virtual Humans in Mixed Realities." *Proceedings of the 52nd Hawaii International Conference on System Science (HICSS),* 2019. Maui, HI.
    *Best Paper Award in the Decision Analytics, Mobile Service, and Service Science Track at HICSS 52
    *ISSIP-IBM-CBA Student Paper Award for Best Industry Studies Paper at HICSS 52

7. **Yuan, L**. & Dennis, A. R., "Interacting Like Humans? Understanding the Effect of Anthropomorphism on Consumer's Willingness to Pay in Online Auctions." *Proceedings of the 50th Annual Hawaii International Conference on System Sciences*, 2017. Waikoloa, HI.

8. **Yuan, L**., Dennis, A. R., & Potter, R., "Interacting Like Humans? Understanding the Neurophysiological Processes of Anthropomorphism and Consumer's Willingness to Pay in Online Auctions." *Proceedings of the International Conference on Information Systems 2016*. Dublin, Ireland.

9. **Yuan, L**., Dennis, A. R., Hsieh, C. J., Hegde, A. P., Feng, X., & Webb, E. M., "The Priming Effects of Relevant and Irrelevant Advertising in Online Auction." *Proceedings of the 48th Annual Hawaii International Conference on System Sciences*, 2015. Kauai, HI.

10. Minas, R. K., Samuel, B., **Yuan, L**., & Khatri, V., "Exploring the Iterative Nature of Corrective SQL Maintenance: An Eye Tracking Study." *24th Workshop on Information Technologies and Systems*, 2014. Auckland, New Zealand.

11. **Yuan, L**. & Dennis, A. R., "The Happiness Premium: The Impact of Emotion on Individuals' Willingness to Pay in Online Auctions," *Proceedings of the 47th Hawaii International Conference on System Science (HICSS)*, 2014. Island of Hawai'i, HI.

12. Sul, H., Dennis, A. R., & **Yuan, L**., "Trading on Twitter: The Financial Information Content of Emotion in Social Media," *Proceedings of the 47th Hawaii International Conference on System Science (HICSS)*, 2014. Island of Hawai'i, HI.
    *Best Paper Award in the Digital and Social Media Track at HICSS 47

13. Minas, R. K., **Yuan, L**., & Khatri, V., "Top-down, Bottom-up or Just Information Foraging? Exploring the Process of Corrective SQL Maintenance Tasks," *11th Annual Symposium on Research in Systems Analysis and Design*, 2012. Vancouver, Canada.

INVITED TALKS

1. Seymour, M., **Yuan, L.**, Dennis, A. R., & Riemer, K., "Less Artificial, More Intelligent: Understanding Affinity, Trust Worthiness, and Preference for Digital Humans." *Americas Conference on Information Systems (AMCIS)-Workshop on AI and Human Interaction*. 2022.

2. **Yuan, L.**, "Behind the Words: The Impact of Emotion Content Embedded in Depression Related Tweets on Tweet Diffusion," *2013 INFORMS Annual Meeting*. Minneapolis, MN.

3. **Yuan, L**. & Bala, H., "Impact of IT Implementation on Patient Satisfaction and Mortality: A Longitudinal Study," *Big 10 Information Systems Conference*, 2012. Minneapolis, MN.

GRANTS, AWARDS & NOMINATIONS

External Grants

- Jiang, S. & **Yuan, L.**, "REFORM Course – Where Sustainability Meets Art, Science, and Entrepreneurship" (#25313-22), funded by VentureWell, Granted *$30,000*. Co-PI.

Internal Grants

1. **Yuan. L.**, "Research Mini Grant: Understand the Process of Concurrent Priming Embedded in Advertisements in Online Auction Context: An Eye Tracking Study", funded by Debbie & Jerry Ivy College of Business on August 22, 2022, Granted $750. PI

2. **Yuan, L.**, "Research Bootstrap Grant: Identifying the Personality Trait of Sensory Processing Sensitivity Through Written Words: A Natural Language Processing Study", funded by Debbie & Jerry Ivy College of Business on April 23, 2021, Granted $5,750. PI

3. Jiang, S., Gansemer-Topf, A., Qin, H., Curtzwiler, G., Shi, X., & **Yuan, L.**, "Enhance Lab Learning Through a New OPERA (Online Platform for Equipment and Remote Assistance) System", funded by Miller Faculty Fellowship on February 18, 2021, Granted $15,000. Co-PI.

4. **Yuan, L.**, "Research Mini Grant: Using Eye Tracking Devices to Investigate the Impact of Concurrent Priming in Electronic Commerce", funded by Debbie & Jerry Ivy College of Business on May 13, 2019, Granted $750. PI

5. **Yuan, L.**, "Research Mini Grant: Understanding the process of how avatar convey affinity in Virtual Reality environment", funded by Debbie & Jerry Ivy College of Business on May 23, 2017, Granted $750. PI

Awards and Nominations

1. Summer Research Grant 2022 *($15,000)*
   Debbie & Jerry Ivy College of Business, Iowa State University
2. Summer Research Grant 2021 *($17,000)*
   Debbie & Jerry Ivy College of Business, Iowa State University
3. Summer Research Grant 2020 *($17,000)*
   Debbie & Jerry Ivy College of Business, Iowa State University
4. ISBA EAC Research Award 2020 *($1,000)*
   Debbie & Jerry Ivy College of Business, Iowa State University
5. 2020-2022 Research Acceleration Grant
   Debbie & Jerry Ivy College of Business, Iowa State University
6. Summer Research Grant 2019 *($17,000)*
   Debbie & Jerry Ivy College of Business, Iowa State University
7. Summer Research Grant 2018 *($8,500)*
   Debbie & Jerry Ivy College of Business, Iowa State University
8. 2021 Tenure-Eligible/Tenured Faculty Early-Career Achievement in Research Nominee
   Debbie & Jerry Ivy College of Business, Iowa State University
9. 2020 Tenure-Eligible/Tenured Faculty Early-Career Achievement in Research Nominee
   Debbie & Jerry Ivy College of Business, Iowa State University

TEACHING EXPERIENCE

Iowa State University

MIS 620 (Ph.D. Seminar, In-person)	*2023*

Basic theories used in Information Systems Research, theory building.

HON322G (Undergraduate Honor Seminar, In-person) "REFORM"	*2023*

Honor seminar combines 3D printing technology, Entrepreneurship, and sustainability.

MIS536 (Graduate, Online & In-person) "Foundations for Business Analytics"	2020-present

Covers data preparation and Data Mining Techniques (Classification models, Prediction models, and Clustering Analysis) using Python.

MIS533 (Graduate, Online) "Database for Decision Making"	2018-present

Focuses on relational database analysis, design, and implementation using structured query language (SQL) in the Oracle environment.

MIS320 (Undergraduate, In-person) "Database Information Systems"	2016-2019

Focuses on conceptual data modeling, logical database design, client/server database architecture, database administration. Students learn the structured query language (SQL) and uses within Oracle.

Indiana University

A337/S400 (Undergraduate, In-person) "Accounting Information Systems"	2013- 2014

Understanding information flow, storage, and database design in support of accounting functions.

BUS-K 201 (Undergraduate, In-person) "The Computer in Business"   2015

Advanced data manipulation techniques using Microsoft Excel.

INSTITUTIONAL SERVICE

Iowa State University

- Kingland Graduate Direct of Business Analytics (2023 - present)
- Rise with WiSE, presenter (2022)
- New Faculty Orientation, panelist (Fall 2020, Fall 2021, Spring 2022)

Debbie & Jerry Ivy College of Business

- Neuroscience Research lab Committee, member (2019-2021)
- International Program Committee, member (2018-present)
- Business Learning Team, member (2015-2016)

Department of Information Systems and Business Analytics

- ISBA Journal List Committee, member (2021)
- ISBA Strategic Planning Committee, member (2019)
- MIS Faculty Search Committee (2016, 2023)

Ph.D. DISSERTATION COMMITTEES

1. Mofarj Aldosari, "Influence of Augmented Reality on Consumer's Willingness to Pay in Mobile E-commerce Websites." Thesis for Doctor of Philosophy in Human Computer Interaction, Iowa State University. In progress, Member.

2. Argha Ray, "Online Disinformation and Hate" Thesis for Doctor of Philosophy in Business, Iowa State University. Completed in 2021, Member.

3. Kambiz Saffarizadeh, "Conversational AI Agents: Investigating AI-Specific Characteristics that Induce Anthropomorphism and Trust in Human-AI Interaction" Thesis for Doctor of Philosophy in Business. Georgia State University, Completed in 2021, Member.

MASTER THESIS COMMITTEE

- Siddartha Jain, "Leveraging Business Intelligence to Overhaul the Reporting Standards of Advertising agencies." Creative component for Master of Science in Information Systems, Completed Spring 2017, Chair.

SERVICE

Journal Editorial Review Boards

1. Editorial Board and Website Editor for International Journal of Electronic Commerce (2020-present)
2. Managing Editor for Foundations and Trends in Information Systems (2014-2015)

Professional Service

1. Vice-present of Sponsorship of AIS SIGHCI (2023-present)
2. Program Co-Chair of *Midwest Association of Information Systems Conference* (2023)
3. Mini Track Co-Chair of "Actors, Agents, and Avatars: Visualizing Digital Humans", *Hawaii International Conference on System Sciences (HICSS)* (2023)
4. Mini Track Co-Chair of "Actors, Agents, and Avatars: Visualizing Digital Humans", *Hawaii International Conference on System Sciences (HICSS)* (2022)
5. Panel Moderator of "HICSS-55 workshop: SWT on Future of Human Work: Harnessing the Power of Augmented Intelligence and Augmented Cognition", *Hawaii International Conference on System Sciences (HICSS)* (2022)
6. Mini Track Co-Chair of "Augmented Intelligence", *Hawaii International Conference on System Sciences (HICSS)* (2021)
7. Panelist of "HICSS-54 Workshop: Machine Aided Work: Harnessing the power of augmented intelligent and augmented cognition", *Hawaii International Conference on System Sciences (HICSS)* (2021)
8. Associate Editor of "HCI, AI, and Intelligence Augmentation" Track, *International Conference of Information Systems* (2021)
9. Panelist of "ICIS Panel Discussion: Augmented Intelligence", *International Conference of Information Systems* (2020)
10. Panelist of "HICSS-53 Workshop: Machine Aided Work: Harnessing the power of augmented intelligent and augmented cognition", *Hawaii International Conference on System Sciences (HICSS)* (2020)
11. Session Chair of "Social Media & Internet of Things Track", *DSI Annual Meeting* (2018)

Peer Reviews

- Americas Conference on Information Systems (AMCIS)
- AIS Transactions on Replication Research
- Australia Conference on IS
- Communications of ACM
- Decision Sciences Journal
- European Conference on Information Systems (ECIS)
- European Journal of Information Systems (EJIS)
- Hawaii International Conference on System Sciences (HICSS)
- Journal of Business Research
- Journal of Electronic Commerce Research
- Information Systems Research (ISR)
- Interaction Studies
- International Conference on Information Systems (ICIS)

- International Journal of Electronic Commerce
- International Journal of Human-Computer Interaction
- International Journal of Information Management
- Journal of the Association for Information Systems
- Journal of Information and Management
- Journal of Management Information systems
- Management Information Systems Quarterly (MIS Quarterly)
- Pacific Asia Conference on Information Systems (PACIS)
- Production and Operations Management
- Virtual Reality & Intelligent Hardware
- Workshop on Information Technologies and Systems