

# Yu-Kai Lin

Associate Professor

Department of Computer Informamtion Systems · Center for Digital Innovation

Robinson College of Business · Georgia State University

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## Employment

2024–	Associate Professor (with tenure)	Robinson College of Business, Georgia State University	Atlanta, GA
2017–2024	Assistant Professor	Robinson College of Business, Georgia State University	Atlanta, GA
2015–2017	Assistant Professor	College of Business, Florida State University	Tallahassee, FL
2010–2015	Research Associate	Artificial Intelligence Lab, University of Arizona	Tucson, AZ

## Education

- Ph.D. Eller College of Management, Department of Management Information Systems  
University of Arizona, 2015  
*Major:* Management Information Systems  
*Minor:* Economics  
*Dissertation:* Health Analytics and Predictive Modeling: Four Essays on Health Informatics
- M.B.A. College of Technology Management, Institute of Technology Management  
National Tsing Hua University, 2006
- B.B.A. College of Business, Department of Information Management  
Chung Yuan Christian University, 2004

## Honors, Awards, and Grants

- Google Cloud Research Credits Award (\$5,000), 2024
- Elegant Scholarship Award, 2023
  - From the podcast “this IS research” by Dr. Nick Berente and Dr. Jan Recker for our paper “[The Scope of Software Patent Protection in the Digital Age: Evidence from Alice](#)” ([listen to the episode](#))
- Best Paper Nominee, *International Conference on Information Systems* (ICIS), 2023
- Top Professor Award, 2023
  - Voted by students enrolled in the Big Data Analytics concentration of the Master of Science Information System (MSIS) program at Georgia State University for teaching effectiveness
- Research Initiation Grant, Georgia State University (\$20,000), 2023
  - Competitive internal university-wide grant
- [AIS Early Career Award](#), Association for Information Systems, 2022
- Runner-up Award for Best Completed Research Paper, *Workshop on e-Business* (WeB), 2022
- Best Associate Editor, *Pacific Asia Conference on Information Systems* (PACIS), 2022
- Best Paper Nominee, *Workshop on Information Technology and Systems* (WITS), 2020
- First Year Assistant Professor Award, Florida State University (\$20,000), 2016
- Planning Grant, Florida State University (\$13,000; with Xinlin Tang), 2015

- Competitive internal university-wide grant
- Wharton Customer Analytics Initiative, research proposal competition winner, 2015
- Best Paper Nominee, *Workshop on Information Technology and Systems* (WITS), 2014

## Research

- **Domains:** Artificial Intelligence, Open Collaboration and Innovation, Intellectual Property, Healthcare
- **Methods:** Applied Econometrics, Machine Learning, Unstructured Data Analytics

### JOURNAL PUBLICATIONS

1. **Yu-Kai Lin** and Likoebe Maruping (2025) “Organizing for AI Innovation: Insights from an Empirical Exploration of U.S. Patents,” *MIS Quarterly* (Forthcoming).
2. **Yu-Kai Lin** and Arun Rai (2024) “[The Scope of Software Patent Protection in the Digital Age: Evidence from Alice](#),” *Information Systems Research*, 35(2), 657–672.
3. John Sudeep Teli\*, Arun Rai\*, and **Yu-Kai Lin\*** (2024) “[Abnormal Returns to AI Patent Infringement Litigations](#),” *Journal of Management Information Systems*, 41(2), 422–452 (\* equal authorship)
4. **Yu-Kai Lin\***, Arun Rai\*, and Yukun Yang\* (2022) “[Information Control for Creator Brand Management in Subscription-Based Crowdfunding](#),” *Information Systems Research* (33:3), pp. 846–866. (\* equal authorship)
5. **Yu-Kai Lin** and Likoebe Maruping (2022) “[Open Source Collaboration in Digital Entrepreneurship](#),” *Organization Science* (33:1), pp. 212–230.
6. **Yu-Kai Lin** and Xiao Fang (2021) “[First, Do No Harm: Predictive Analytics to Reduce In-Hospital Adverse Events](#),” *Journal of Management Information Systems* (38:4), pp. 1122–1149.
7. **Yu-Kai Lin**, Mingfeng Lin, and Hsinchun Chen (2019) “[Do Electronic Health Records Affect Quality of Care? Evidence from the HITECH Act](#),” *Information Systems Research* (30:1), pp. 306–318.
8. **Yu-Kai Lin**, Hsinchun Chen, Randall Brown, and Shu-Hsing Li. (2017) “[Healthcare Predictive Analytics for Risk Profiling in Chronic Care: A Bayesian Multitask Learning Approach](#),” *MIS Quarterly* (41:2), pp. 473-495.
9. **Yu-Kai Lin**, Hsinchun Chen, Randall A Brown, Shu-Hsing Li, and Hung-Jen Yang. (2014) “[Time-to-Event Predictive Modeling for Chronic Conditions Using Electronic Health Records](#),” *IEEE Intelligent Systems* (29:3), pp. 14-20.
10. **Yu-Kai Lin**, Hsinchun Chen, and Randall A. Brown. (2013) “[MedTime: A Temporal Information Extraction System for Clinical Narratives](#),” *Journal of Biomedical Informatics* (46), pp. S20-S28.

### WORKING PAPERS

1. On the Measurement of AI Skills: Methods and Implications (with Jeongmin Kim and Arun Rai)
2. Security Knowledge Spillovers among Open Source Software Projects (with Weifeng Li)
3. Open Source Software Supply Chains as Sociotechnical Systems (with Matt Germonprez, Yiqi Li, and Sean Goggins)

## CONFERENCE PAPERS AND PRESENTATIONS

1. Operationalizing Open Source Supply Chains as Complex Sociotechnical Systems (with Matt Germonprez, Sean Goggins, and Yiqi Li); *The 2024 OpenForum Academy Symposium*; November 13-14, 2024
2. AI Labor Markets: Toward a Dynamic Skills-Based Approach to Measurement (with Jeongmin Kim and Arun Rai); *The 2023 International Conference on Information Systems (ICIS 2023)*; December 10-13, 2023 – **Best Paper Nominee**
3. Democratizing AI Innovation with Open Data: Evidence from ImageNet (with Jing Tian and Arun Rai); *The 2023 Conference on Information Systems and Technology (CIST 2023)*; October 14-15, 2023
4. A Theory of Open Source Security: The Spillover of Security Knowledge in Vulnerability Disclosures through Software Supply Chains (with Weifeng Li); *The 2023 Conference on Information Systems and Technology (CIST 2023)*; October 14-15, 2023
5. A Theory of Open Source Security: The Spillover of Security Knowledge in Vulnerability Disclosures through Software Supply Chains (with Weifeng Li); *The 2023 Workshop on the Economics of Information Security (WEIS 2023)*; July 5-8, 2023
6. Market Reactions to AI Patent Infringement Lawsuits: A Signaling-Based View (with John Sudeep Teli and Arun Rai); *The 2022 Workshop on e-Business (WeB 2022)*; December 10, 2022 – **Runner-up Award for Best Completed Research Paper**
7. Patent Protection and Software Innovation: Evidence from Alice (with Arun Rai); *The 2021 Workshop on Information Systems Economics (WISE 2021)*; December 16-17, 2021
8. Toward a Better Understanding of AI Innovations (with Likoebe Maruping); *The 2021 Conference on Information Systems and Technology (CIST 2021)*; October 23-24, 2021
9. Toward a Better Understanding of AI Innovations (with Likoebe Maruping); *The 2020 Workshop on Information Technologies and Systems (WITS 2020)*; December 16-18, 2020 – **Best Paper Nominee**
10. Restricting the Scope of Software Patent Protection: Beneficial Evidence of Alice (with Arun Rai); *The 2020 INFORMS Conference on Information Systems and Technology (CIST 2020)*; November 7-8, 2020
11. Open Source Collaboration in Digital Ventures (with Likoebe Maruping); *The 2020 INFORMS Conference on Information Systems and Technology (CIST 2020)*; November 7-8, 2020
12. Getting Behind Closed Doors: Developing Fan Engagement in Subscription-Based Crowdfunding (with Arun Rai and Yukun Yang); *The 2019 Workshop on Information Systems and Economics (WISE 2019)*; December 19-20, 2019
13. Getting Behind Closed Doors: Developing Fan Engagement in Subscription-Based Crowdfunding (with Arun Rai and Yukun Yang); *The 2019 INFORMS Conference on Information Systems and Technology (CIST 2019)*; October 19-20, 2019
14. A Prediction Model for Adverse Events in Hospitalized Patients (with Xiao Fang); *The 2018 INFORMS Conference (INFORMS 2018)*; November 4-7, 2018
15. First, Do No Harm: Predictive Analytics for Risks of In-Hospital Adverse Events (with Xiao Fang); *The 2017 INFORMS Data Science Workshop (DS 2017)*; October 21, 2017
16. Differentiating the Impacts of Adoption and Use on Organizational Performance: The Case of Electronic Health Records (with Mingfeng Lin and Hsinchun Chen); *The 2017 Winter Conference on Business Analytics (WCBA 2017)*; March 2-4, 2017

17. Healthcare Predictive Analytics for Risk Profiling in Chronic Care: A Bayesian Multitask Learning Approach (with Hsinchun Chen, Randall Brown, Shu-Hsing Li, and Hung-Jen Yang); *The 2017 Winter Conference on Business Analytics (WCBA 2017)*; March 2-4, 2017
18. To Join or To Take Over: External Corporate Ventures and the Choice between Investment and Acquisition in the IT Industry (with Mingfeng Lin and Xinlin Tang); *The 2016 Workshop on Information Systems Economics (WISE 2016)*; December 15-16, 2016
19. Bayesian Multi-Task Learning for Risk Profiling in Chronic Care (with Hsinchun Chen, Randall Brown, Shu-Hsing Li, and Hung-Jen Yang); *The 2015 INFORMS Healthcare Conference*; July 29-31, 2015
20. Beyond Adoption: Does Meaningful Use of EHR Improve Quality of Care? (with Mingfeng Lin and Hsinchun Chen); *The 2014 Workshop on Information Systems Economics (WISE 2014)*; December 17-19, 2014
21. Healthcare Analytics and Clinical Intelligence: A Risk Prediction Framework for Chronic Care (with Hsinchun Chen, Randall Brown, Shu-Hsing Li, and Hung-Jen Yang); *The 2014 Workshop on Information Technologies and Systems (WITS 2014)*; December 17-19, 2014 – **Best Paper Nominee**
22. Predictive Analytics for Chronic Care: A Time-to-Event Modeling Framework using Electronic Health Records (with Hsinchun Chen, Randall Brown, Shu-Hsing Li, and Hung-Jen Yang); *The 2014 INFORMS Conference on Information Systems and Technology (CIST 2014)*; November 8-9, 2014
23. Beyond Adoption: Does Meaningful Use of EHR Improve Quality of Care? (with Mingfeng Lin and Hsinchun Chen); *The 2014 INFORMS Conference on Information Systems and Technology (CIST 2014)*; November 8-9, 2014
24. Beyond Adoption: Does Meaningful Use of EHR Improve Quality of Care? (with Mingfeng Lin and Hsinchun Chen); *The 5th Annual Workshop on Health IT and Economics (WHITE 2014)*; October 10-11, 2014
25. MedTime: A Temporal Information Extraction System for Clinical Narratives (with Randall A. Brown, and Hsinchun Chen); *The 2012 i2b2 Workshop*; November 2, 2012
26. Automatic Learning of A Supervised Classifier for Patent Prior Art Retrieval (with Hung-Chen Chen, Chih-Ping Wei, and Chin-Sheng Yang); *The 2010 Pacific Asia Conference on Information Systems (PACIS 2010)*; July 9-12, 2010
27. Exploiting Item Heterogeneity for Collaborative Filtering Recommendation (with Hung-Chen Chen, Chih-Ping Wei, and Ying-Siou Dai); *The 4th China Summer Workshop on Information Management (CSWIM 2010)*; June 19-20, 2010
28. Deriving Technology Roadmaps with Tech Mining Techniques (with Fu-Ren Lin, Chih-Ping Wei, and Yu-Liang Shyu); *The 2008 Pacific Asia Conference on Information Systems (PACIS 2008)*; July 4-7, 2008

#### INVITED PRESENTATIONS

- University of Georgia, Department of Management Information Systems, October 2024: *Organizing for AI Innovations: Insights from an Empirical Exploration of U.S. Patents*
- Front Range Machine Learning Alliance (FoRMLA) seminar series, November 2022: *Toward a Better Understanding of AI Innovations*
- Southern University of Science and Technology, Department of Information Systems and Management Engineering, November 2021: *Patent Protection and Software Innovation: Evidence from Alice*

- Auburn University, Department of Systems and Technology, November 2020: *Patent Protection and Software Innovation: Evidence from Alice*
- ETH Zurich, MIS seminar, December 2019: *First, Do No Harm: Predictive Analytics to Reduce In-Hospital Adverse Events*
- University of Georgia, Department of Management Information Systems, April 2019: *Getting Behind Closed Doors: Developing Fan Engagement in Subscription-Based Crowdfunding*
- Georgia State University, Department of Computer Information Systems, March 2017: *Healthcare Predictive Analytics for Risk Profiling in Chronic Care: A Bayesian Multitask Learning Approach*
- Florida State University, Department of Entrepreneurship, Strategy, and Information Systems, January 2015: *Beyond Adoption: Does Meaningful Use of EHR Improve Quality of Care?*
- Indiana University, Operations and Decision Technologies Department, December 2014: *Beyond Adoption: Does Meaningful Use of EHR Improve Quality of Care?*
- University of Cincinnati, Department of Operations, Business Analytics, and Information Systems, September 2014: *Healthcare Analytics and Clinical Intelligence: A Risk Prediction Framework for Chronic Care*

## Service Activities

### Service to the Profession

#### Editorial Services

- Editorial Review Board, *Information Systems Research* (2024 – Present)
- Associate Editor, *Decision Support Systems* (2024 – Present)
- Associate Editor, *MIS Quarterly* Special Issue on “Digital Resilience”, 2020
- Guest Associate Editor, *MIS Quarterly*, 2018-2020
- Associate Editor, *International Conference on Information Systems*, 2019-2021, 2023-2024
- Associate Editor, *Annual Meeting of the Academy of Management*, 2022
- Associate Editor, *Pacific Asia Conference on Information Systems*, 2016, 2022, 2024

#### Peer Reviews

- Journals
  - MIS Quarterly (MISQ)
  - Information Systems Research (ISR)
  - Management Science
  - Journal of Management Information Systems (JMIS)
  - Journal of the Association for Information Systems (JAIS)
  - Production and Operations Management (POM)
  - ACM Transactions on Management Information Systems (TMIS)
  - INFORMS Journal on Data Science (IJDS)
  - INFORMS Journal on Computing (JOC)
  - ACM Transactions on Data Science
  - Decision Sciences
  - Decision Support Systems
  - Information & Management
  - Journal of Information Technology

- Artificial Intelligence in Medicine
- IEEE Intelligent Systems
- Journal of Economic Behavior and Organization
- Journal of the Association for Information Science and Technology (JASIST)
- Conferences and Workshops
  - ICIS: International Conference on Information Systems
  - CIST: Conference on Information Systems and Technology
  - WITS: Workshop on Information Technologies and Systems
  - INFORMS Conference on Data Science
  - International Conference for Smart Health
  - International Conference on Service Science and Innovation
  - ECIS: European Conference on Information Systems
  - AMCIS: The Americas Conference on Information Systems
  - PACIS: Pacific Asia Conference on Information Systems
  - AMIA: American Medical Informatics Association Annual Symposium

### **Grants / Program Reviews**

- Research Grants Council of Hong Kong
- Maryland Industrial Partnerships Program

### **Service to the College & Department**

- Member, *CIS PhD Program Committee* (Spring 2024–present)
- Member, *CIS Tenure Track Faculty Recruitment Committee* (Spring 2024)
- Member, *CIS Computing Infrastructure Committee* (2023)
- Member, *CIS Tenure Track Faculty Recruitment Committee–Cybersecurity* (Fall 2022–Spring 2023)
- Member, *CIS Tenure Track Faculty Recruitment Committee–NextGen AI* (Fall 2022–Spring 2023)
- Member, *CIS Tenure Track Faculty Recruitment Committee* (Fall 2021–Spring 2022)
- Faculty Adviser, *Student Chapter of the Association of Information Technology Professionals* (2018–present)
- Member, *Analytics Pathway Task Force for MBA Course Redesign* (2018)

### **Doctoral Dissertation Committees**

- An Nguyen (current status: proposal development)
- Sudeep Teli (current status: proposal development)
- Yingxin Zhou (current status: proposal defended)
- Yang Yi (current status: proposal defended)
- Wei Zhang (current status: proposal defended)
- Junyoung Park (completed in 2022; placement: Auburn University)
- Yanran Liu (completed in 2021; placement: University of Cincinnati)
- Heeseung Lee (completed in 2021; placement: Hong Kong Baptist University)
- Xinying Liu (completed in 2020; placement: University of Houston-Clear Lake)

# Teaching Experience

## GEORGIA STATE UNIVERSITY

Course	Title	Semester
<b>PhD</b>		
CIS 9200	Topics in Computer Information Systems	Spring 2025
<b>Graduate</b>		
CIS 8398	Advanced AI Topics in Business	Fall 2022 - Fall 2024
CIS 8045	Unstructured Data Management	Fall 2021 - Fall 2022
CIS 8392	Advanced Topics in Big Data Analytics	Spring 2019 - Spring 2022
CIS 8040	Fundamentals of Database Management Systems	Fall 2017
<b>Undergraduate</b>		
CIS 4730	Unstructured Data Management	Fall 2017 - Fall 2020
CIS 3730	Database Management Systems	Spring 2024, Spring 2025

## FLORIDA STATE UNIVERSITY

Course	Title	Semester
<b>Undergraduate</b>		
ISM 4117	Business Intelligence	Fall 2015 - Spring 2017

## UNIVERSITY OF ARIZONA

Course	Title	Semester
<b>Undergraduate</b>		
MIS 373	Basic Operations Management	Summer 2014

# Professional Membership

- Association for Information Systems (AIS)
  - AIS SIGDITE (Digital Innovation, Transformation, and Entrepreneurship)
- Institute for Operations Research and Management Sciences (INFORMS)
  - INFORMS Information Systems Society (ISS)
- Academy of Management (AOM)
  - Communication, Digital Technology, and Organization (CTO)
  - Technology and Innovation Management (TIM)

# Computer Skills

- **Programming Language:** C, C++, JAVA, Python, R, SQL, Stan
- **Databases:** MySQL, Oracle, PostgreSQL, MongoDB, Neo4j
- **Operating Systems:** Windows, Linux