## KENG L. SIAU

Lee Kong Chian Professor of Information Systems School of Computing and Information Systems Singapore Management University

Email: klsiau@smu.edu.sg

#### **EDUCATION**

Degree: Ph.D. in Business Administration, 1996

**University:** University of British Columbia, Canada (1992-1996)

Ranked #35, Best Global Universities Rankings, U.S. News

and World Report, 2024

Ranked #41, Times Higher Education World University

Rankings, 2024

Ranked #34, QS World University Rankings, 2024

Ranked #26, QS World University Rankings for Computer

Science and Information Systems, 2024

Ranked #40, QS World University Rankings for Business

& Management Studies, 2024

**Area of Study:** Management Information Systems (Major)

Cognitive Psychology (Minor)

Degree: Master of Science, 1991

**University:** National University of Singapore (1989-1991)

Ranked #26, Best Global Universities Rankings, U.S. News

and World Report, 2024

Ranked #19, Times Higher Education World University

Rankings, 2024

Ranked #8, QS World University Rankings, 2024

Ranked #6, QS World University Rankings for Computer

Science and Information Systems, 2024

**Area of Study:** Computer & Information Sciences

Degrees: Bachelor of Science (Hons.), 1989

**University:** National University of Singapore (1985-1989)

Ranked #26, Best Global Universities Rankings, U.S. News

and World Report, 2024

Ranked #19, Times Higher Education World University

Rankings, 2024

Ranked #8, QS World University Rankings, 2024

Ranked #6, QS World University Rankings for Computer

Science and Information Systems, 2024

## **Area of Study:** Computer & Information Sciences

### ACADEMIC EXPERIENCE

DENTIC ETT ETTEL (CE	
July 2024 – present	Lee Kong Chian Professor of Information Systems School of Computing and Information Systems Singapore Management University
June 2021 – June 2024	Department Head Chair Professor of Information Systems Department of Information Systems City University of Hong Kong
Sept 2022 – July 2024	Chair Professor (Affiliate) School of Data Science City University of Hong Kong
Jan 2024 – July 2024	Inaugural Affiliate Professor CityU Academy of Innovation City University of Hong Kong
June 2012 – June 2021	Head of Business Programs ("Business Dean" equivalent) Department of Business and Information Technology College of Arts, Sciences, and Business Missouri University of Science and Technology
Sept 2006 – June 2012	Edwin J. Faulkner Chair Professor Department of Management College of Business Administration University of Nebraska-Lincoln
Sept 2005 – June 2012	Full Professor Department of Management College of Business Administration University of Nebraska-Lincoln
Sept 2000 – Aug 2005	Associate Professor Department of Management College of Business Administration University of Nebraska-Lincoln

Aug 1996 – Aug 2000 **Assistant Professor** Department of Management College of Business Administration University of Nebraska-Lincoln

#### AWARDS AND ACCOLADES

1. Consistently ranked as a Top Information Systems Researcher in the world based on h-index (https://ailab-ua.github.io/courses/h index/; https://eller.arizona.edu/departments-research/centers-labs/artificialintelligence/research/resources)

a. 2010 Rank: 61 (h-index = 27)b. 2011 Rank: 64 (h-index = 27)c. 2012 Rank: 54 (h-index = 34)d. 2015/16 Rank: 46 (h-index = 42)e. 2017 Rank: 51 (h-index = 47)f. 2019 Rank: 59 (h-index = 52)g. 2020 Rank: 57 (h-index = 54)h. 2022 Rank: 37 (h-index = 68)i. 2024 Rank: 33 (h-index = 74)

- 2. Ranked number 14 for top information systems researchers based on productivity rate (productivity rate of 1.93) (ACM Transactions on Management Information Systems, Vol. 2, No. 2, Article 7, Publication date: June 2011)
- 3. One of the top 2% most-cited scientists in the world (ranked in the top 1%), according to a study by Stanford University (Baas, J., Boyack, K., Ioannidis, J. (2020, 2021, 2022, 2023), "Updated science-wide author databases of standardized citation indicators," Mendeley Data, V3, doi: 10.17632/btchxktzyw.3)
- 4. Ranked as one of the top ten e-commerce researchers in the world (Arithmetic Rank of 7, Geometric Rank of 3)<sup>1</sup>, 2006
- 5. Citation count for the paper "Building Customer Trust in Mobile Commerce" is ranked in the top 1% in the field as reported by Essential Science Indicators, 2006
- 6. Association for Information Systems AMCIS Outstanding Leader Award, 2023
- 7. Association for Information Systems Fellow Award, 2022

<sup>&</sup>lt;sup>1</sup> Kim, S., Aiken, M., and Vanjani, M. (2006). Profiles in electronic commerce. In M. Adams and A. Alkhafaji (Eds.), Business Research Yearbook, Vol. 13, pp. 464-469.

- 8. Association for Information Systems Sandra Slaughter Service Award, 2019
- 9. Association for Information Systems Award for Outstanding Contribution to IS Education, 2019
- 10. Association for Information Systems Distinguished Member Cum Laude, 2019
- 11. Faculty External Recognition Award (Tier 3), Missouri S&T, 2020
- 12. Outstanding Contributions to Graduate Studies Award for 2019-2020, Missouri S&T
- 13. Post-Tenure Award, Missouri S&T, 2018
- 14. IBM Innovation Award, 2010
- 15. IBM Faculty Award, 2006, 2008
- 16. International Federation for Information Processing (IFIP) Outstanding Service Award, 2006
- 17. University of Nebraska-Lincoln College of Business Administration Research Award, 2005
- 18. Outstanding Leader Award, Information Resources Management Association, 2004
- 19. Organizational Leadership Award, Information Resources Management Association, 2000
- 20. University of Nebraska-Lincoln Distinguished Teaching Award, 2001
- 21. College of Business Administration Distinguished Teaching Award, University of Nebraska-Lincoln, 2001

#### RESEARCH

Fellow, Association for Information Systems

#### A. Citation Count, h-Index, and Rankings

- 1. Citation count according to Google Scholar: > 23,000
- 2. h-index according to Google Scholar: 76
- 3. i10-index according to Google Scholar: 201

According to J.E. Hirsch, who proposed the h-index and published the idea in the *Proceedings of the National Academy of Sciences of the United States of America* (2005),

- (i) h-index of 15-20, fellowship in the National Physical Society
- (ii) h-index of 45 or higher, membership in the National Academy of Sciences (https://beckerguides.wustl.edu/authors/hindex)
- 4. Totaling more than US \$20 million in funding
- 5. In 2020, 2021, 2022, and 2023 Stanford University's lists of top 2% most-cited scientists in the world (ranked in the top 1%)

# B. Selected Journal Articles (over 60 articles in ABDC A\* and A journals; over 100 Scopus publications)

\*over 150 refereed and published conference papers not listed in this resume \*over 20 edited books and proceedings (as editor or co-editor) not listed in this resume

- 1. Siau, K., Tan, K., Chan, H., "Visual Knowledge Query Language," *IEICE Transactions on Information and Systems*, Vol. E75-D, No. 5, September 1992, pp. 697-703. (Citation count 26)
- 2. Chan, H., Wei, K., Siau, K., "User-Database Interface: The Effect of Abstraction Levels on Query Performance," *Management Information Systems Quarterly*, Vol. 17, No. 4, December 1993, pp. 441-464. (Citation count 128)
- 3. Chan, H., Wei, K., Siau, K., "An Empirical Study on End Users' Update Performance for Different Abstraction Levels," *International Journal of*

- Human-Computer Studies, Vol. 41, No. 3, 1994, pp. 309-328. (Citation count 29)
- 4. Chan, H., Wei, K., Siau, K., "The Effect of a Database Feedback System on User Performance," *Behaviour and Information Technology: An International Journal on the Human Aspects of Computing*, Vol. 14, No. 3, May-June 1995, pp. 152-162. (Citation count 23)
- 5. Siau, K., Chan, H., Wei, K., "End Users Communication with Systems: The Effects of Conceptual and Logical Interfaces on Visual Query Performance of End Users," *Informatie*, Vol. 37, November 1995, pp. 660-668. (Citation count 3)
- 6. Csinger, A., Siau, K., "The Global Public Key Infrastructure: Terms and Concepts," *IEEE Computer*, Vol. 31, No. 9, September 1998, pp. 30-31. (Citation count 5)
- 7. Siau, K., Wand, Y., Benbasat, I., "The Relative Importance of Structural Constraints and Surface Semantics in Information Modeling," *Information Systems*, Vol. 22, No. 2&3, 1997, pp. 155-170. (Citation count 99)
- 8. Chan, H., Siau, K., Wei, K., "The Effect of Data Model, System and Task Characteristics on User Query Performance An Empirical Study," *The DATA BASE for Advances in Information Systems*, Vol. 29, No. 1, Winter 1998, pp. 31-49. (Citation count 69)
- 9. Siau, K., "Xcert Software Inc.," *Journal of Information Technology*, Vol. 14, No. 3, September 1998, pp. 235-242. (Citation count 7)
- 10. Siau, K., Nah, F., Teng, L., "Acceptable Internet Use Policy," *Communications of the ACM*, Vol. 45, No. 1, 2002, pp. 75-79. (Citation count 183)
- 11. Zhao, L., Siau, K., "Component-Based Development Using UML," *Communications of the Association for Information Systems*, Vol. 9, 2002, pp. 207-222. (Citation count 12)
- 12. Siau, K., Messersmith, J., "Analyzing ERP Implementation at a Public University Using the Innovation Strategy Model," *International Journal of Human-Computer Interaction*, Vol. 16, No. 1, 2003, pp. 57-80. (Citation count 79)
- 13. Katerattanakul, P., Siau, K., "Creating A Virtual Store Image," *Communications of the ACM*, Vol. 46, No. 12, 2003, pp. 226-232. (Citation count 71)

- 14. Davis, S., Siau, K., Dhenuvakonda, K., "A Fit-Gap Analysis of E-Business Curricula vs. Industry Need," *Communications of the ACM*, Vol. 46, No. 12, 2003, pp. 167-177. (Citation count 48)
- 15. Erickson, J., Siau, K., "e-ducation," *Communications of the ACM*, Vol. 46, No. 9, 2003, pp. 134-140. (Citation count 46)
- 16. Siau, K., Shen, Z., "Building Customer Trust in Mobile Commerce," *Communications of the ACM*, Vol. 46, No. 4, 2003, pp. 91-94. (Citation count 1142)
- 17. Lee, J., Siau, K., Hong, S., "Enterprise Integration with ERP and EAI," *Communications of the ACM*, Vol. 46, No. 2, 2003, pp. 54-60. (Citation count 706)
- 18. Siau, K., "Health Care Informatics," *IEEE Transactions on Information Technology in Biomedicine*, Vol. 7, No. 1, March 2003, pp. 1-7. (Citation count 177)
- 19. Southard, P., Siau, K., "A Survey of Online E-Banking Retail Initiatives," *Communications of the ACM*, Vol. 47, No. 10, October 2004, pp. 99-102. (Citation count 101)
- 20. Siau, K., Chan, H., Wei, K., "Effects of Query Complexity and Learning on Novice User Query Performance with Conceptual and Logical Database Interfaces," *IEEE Transactions on Systems, Man, and Cybernetics-Part A: Systems and Humans*, Vol. 34, No. 2, 2004, pp. 276-281. (Citation count 54)
- 21. Siau, K., "Informational and Computational Equivalence in Comparing Information Modeling Methods," *Journal of Database Management*, Vol. 15, No. 1, 2004, pp. 73-86. (Citation count 188)
- 22. Siau, K., Lee, L., "Are Use Case and Class Diagrams Complementary in Requirements Analysis? An Experimental Study on Use Case and Class Diagrams in UML," *Requirements Engineering*, Vol. 9, No. 4, 2004, pp. 229-237. (Citation count 110)
- 23. Siau, K., Sheng, H., Nah, F., Davis, S., "A Qualitative Investigation on Consumer Trust in Mobile Commerce," *International Journal of Electronic Business*, Vol. 2, No. 3, May-June 2004, pp. 283-300. (Citation count 155)

- 24. Siau, K., Long, Y., "Synthesizing E-Government Stage Models A Meta-Synthesis Based on Meta-Ethnography Approach," *Industrial Management and Data Systems*, Vol. 105, No. 4, 2005, pp. 443-458. (Citation count 707)
- 25. Siau, K., Tan, X., "Improving the Quality of Conceptual Modeling Using Cognitive Mapping Techniques," *Data and Knowledge Engineering*, Vol. 55, No. 3, 2005, pp. 343-365. (Citation count 198)
- 26. Nah, F., Siau, K., Tian, Y., "Knowledge Management Mechanisms of Financial Service Sites," *Communications of the ACM*, Vol. 48, No. 6, 2005, pp. 117-123. (Citation count 50)
- 27. Siau, K., Tan, X., "Technical Communication in Information Systems Development: The Use of Cognitive Mapping," *IEEE Transactions on Professional Communication*, Vol. 48, No. 3, September 2005, pp. 269-284. (Citation count 63)
- 28. Nah, F., Siau, K., Sheng, H., "The Value of Mobile Applications: A Utility Company Study," *Communications of the ACM*, Vol. 48, No. 2, February 2005, pp. 85-90. (Citation count 392)
- 29. Erickson, J., Lyytinen, K., Siau, K., "Agile Modeling, Agile Software Development, and Extreme Programming: The State of Research," *Journal of Database Management*, Vol. 16, No. 4, 2005, pp. 88-100. (Citation count 554)
- 30. Siau, K., Tan, X., "Evaluation Criteria for Information Systems Development Methodologies," *Communications of the Association for Information Systems*, Vol. 16, 2005, pp. 856-872. (Citation count 37)
- 31. Bajaj, A., Batra, D., Hevner, A., Parsons, J., Siau, K., "Systems Analysis and Design: Should We Be Researching What We Teach?" *Communications of the Association for Information Systems*, Vol. 15, 2005, pp. 478-493. (Citation count 52)
- 32. Sheng, H., Nah, F., Siau, K., "Strategic Implications of Mobile Technology: A Case Study Using Value-Focused Thinking," *Journal of Strategic Information Systems*, Vol. 14, No. 3, 2005, pp. 269-290. (Citation count 336)
- 33. Siau, K., Tan, X., "Cognitive Mapping Techniques for User-Database Interaction," *IEEE Transactions on Professional Communication*, Vol. 49, No. 2, 2006, pp. 96-108. (Citation count 38)

- 34. Siau, K., Sheng, H., Nah, F., "Use of a Classroom Response System to Enhance Classroom Interactivity," *IEEE Transactions on Education*, Vol. 49, No. 3, 2006, pp. 398-403. (Citation count 368)
- 35. Siau, K., Tan X., "Using Cognitive Mapping Techniques to Supplement UML and UP in Information Requirements Determination," *Journal of Computer Information Systems*, Vol. 46, No. 5, 2006, pp. 59-66. (Citation count 30)
- 36. Siau, K., Loo, P., "Identifying Difficulties in Learning UML," *Information Systems Management*, Vol. 23, No. 3, 2006, pp. 43-51. (Citation count 160)
- 37. Allen, G., Bajaj, A., Khatri, V., Ram, S., Siau, K., "Advances in Data Modeling Research," *Communications of the Association for Information Systems*, Vol. 17, 2006, pp. 677-692. (Citation count 10)
- 38. Siau, K, Long, Y., "Using Social Development Lenses to Understand E-Government Development," *Journal of Global Information Management*, Vol. 14, No. 1, 2006, pp. 47-62. (Citation count 192)
- 39. Long, Y., Siau, K., "Social Network Structures in Open Source Software Development Teams," *Journal of Database Management*, Vol. 18, No. 2, 2007, pp. 25-40. (Citation count 125)
- 40. Erickson, J., Siau, K., "Theoretical and Practical Complexity of Modeling Methods," *Communications of the ACM*, Vol. 50, No. 8, 2007, pp. 46-51. (Citation count 89)
- 41. Zhao, L., Siau, K. "Information Mediation Using Metamodels An Approach Using XML and Common Warehouse Metamodel," *Journal of Database Management*, Vol. 18, No. 3, 2007, pp. 69-82. (Citation count 18)
- 42. Fruhling, A., Siau, K., "Assessing Organizational Innovation Capability and Its Effect on E-Commerce Initiatives," *Journal of Computer Information Systems*, Vol. 47, No. 4, 2007, pp. 91-103. (Citation count 120)
- 43. Katerattanakul, P., Siau, K., "Factors Affecting the Quality of Personal Web Portfolios," *Journal of the American Society for Information Science and Technology*, Vol. 59, No. 1, 2008, pp. 63-76. (Citation count 24)
- 44. Siau, K., Tan, X., "Use of Cognitive Mapping Techniques in Information Systems Development," *Journal of Computer Information Systems*, Vol. 48, No. 4, 2008, pp. 49-57. (Citation count 46)

- 45. Sheng, H., Nah, F., Siau, K., "An Experimental Study on U-commerce Adoption: Impact of Personalization and Privacy Concerns," *Journal of the Association for Information Systems*, Vol. 9, No. 6, 2008, pp. 344-376. (Citation count 486)
- 46. Siau, K., Long Y. "Factors Impacting E-Government Development," *Journal of Computer Information Systems*, Vol. 50, No.1, 2009, pp. 98-107. (Citation count 200)
- 47. Siau, K., Tian, Y., "A Semiotics Analysis of UML Graphical Notations," *Requirements Engineering*, Vol. 14, No. 1, 2009, pp. 15-26. (Citation count 36)
- 48. Siau, K., Tan, X., Sheng, H., "Important Characteristics of Software Development Team Members: An Empirical Investigation Using Repertory Grid," *Information Systems Journal*, Vol. 20, No. 6, 2010, pp. 563-580. (Citation count 132)
- 49. Siau, K., Erickson, J., Nah, F., "Effects of National Culture on Types of Knowledge Sharing in Virtual Communities," *IEEE Transactions on Professional Communication*, Vol. 53, No. 3, 2010, pp. 278-292. (Citation count 73)
- 50. Sheng, H., Siau, K., Nah, F., "Understanding the Values of Mobile Technology in Education: A Value-Focused Thinking Approach," *The DATA BASE for Advances in Information Systems*, Vol. 41, No. 2, 2010, pp. 25-44. (Citation count 153)
- 51. Siau, K., Rossi, M., "Evaluation Techniques for Systems Analysis and Design Modelling Methods: A Review and Comparative Analysis," *Information Systems Journal*, Vol. 21, No. 3, 2011, pp. 249-268. (Citation count 283)
- 52. Tan, X., Alter, S., Siau, K., "Using Service Responsibility Tables to Supplement UML in Analyzing e-Service Systems," *Decision Support Systems*, Vol. 51, No. 3, 2011, pp. 350-360. (Citation count 17)
- 53. Gao, S., Krogstie, J., Siau, K., "Development of an Instrument to Measure the Adoption of Mobile Services," *Mobile Information Systems*, Vol. 7, No. 1, 2011, pp. 45-67. (Citation count 212)
- 54. Chen, X., Siau, K., Nah, F., "Empirical Comparison of 3-D Virtual World and Face-to-Face Classroom for Higher Education," *Journal of Database Management*, Vol. 23, No. 3, 2012, pp. 30-49. (Citation count 23)

- 55. Siau, K., Tian, Y., "Open Source Software Development Process Model A Grounded Theory Approach," *Journal of Global Information Management*, Vol. 21, No. 4, 2013, pp. 103-120. (Citation count 11)
- 56. Gao, S., Krogstie, J., Siau, K., "Adoption of Mobile Information Services: An Empirical Study," *Mobile Information Systems*, Vol. 10, No. 2, 2014, pp. 147-171. (Citation count 121)
- 57. Nah, F., Schiller, S., Mennecke, B., Siau, K., Eschenbrenner, B., Sattayanuwat, P., "Collaboration in Virtual Worlds: Impact of Task Complexity on Team Trust and Satisfaction," *Journal of Database Management*, Vol. 28, No. 4, 2017, pp. 60-78. (Citation count 9)
- 58. Siau, K., Wang, W., "Building Trust in Artificial Intelligence, Machine Learning, and Robotics," *Cutter Business Technology Journal*, Vol. 31, No. 2, 2018, pp. 47-53. (Citation count 633)
- 59. Adapa, A., Nah, F., Hall, R., Siau, K., Smith, S., "Factors Influencing the Adoption of Smart Wearable Devices," *International Journal of Human-Computer Interaction*, Vol. 34, No. 5, 2018, pp. 399-409. (Citation count 279)
- 60. Wang, W., Siau, K., "Artificial Intelligence, Machine Learning, Automation, Robotics, Future of Work, and Future of Humanity A Review and Research Agenda," *Journal of Database Management*, Vol. 30, No. 1, 2019, pp. 61-79. (Citation count 495)
- 61. Stephanidis, C., Salvendy, G., Antona, M., Chen, J.Y.C., Dong, J., Duffy, V.G., Fang, X., Fidopiastis, C., Fragomeni, G., Fu, L.P., Guo, Y., Harris, D., Ioannou, A., Jeong, K., Konomi, S., Krömker, H., Kurosu, M., Lewis, J.R., Marcus, A., Meiselwitz, G., Moallem, A., Mori, H., Nah, F., Ntoa, S., Rau, P.P., Schmorrow, D., Siau, K., Streitz, N., Wang, W., Yamamoto, S., Zaphiris, P., Zhou, J., "Seven HCI Grand Challenges," *International Journal of Human-Computer Interaction*, Vol. 35, No. 14, 2019, pp. 1229-1269. (Citation count 430)
- 62. Fang, H., Siau, K., Memili, E., Dou, J., "Cognitive Antecedents of Family Business Bias in Investment Decisions," *Entrepreneurship Theory and Practice*, Vol. 43, No. 2, 2019, pp. 409-416. (Citation count 29)
- 63. Siau, K., Wang, W., "Artificial Intelligence (AI) Ethics Ethics of AI and Ethical AI," *Journal of Database Management*, Vol. 31, No. 2, 2020, pp. 74-87. (Citation count 366)

- 64. Xie, X., Siau, K., Nah, F., "COVID-19 Pandemic Online Education in the New Normal and the Next Normal," *Journal of Information Technology Case and Application Research*, Vol. 22, No. 3, 2020, pp. 175-187. (Citation count 392)
- 65. Chen, X., Siau, K., "Business Analytics/Business Intelligence and IT Infrastructure: Impact on Organizational Agility," *Journal of Organizational and End User Computing*, Vol. 32, No. 4, 2020, pp. 138-161. (Citation count 73)
- 66. Sharma, K., Zhan, X., Nah, F., Siau, K., Cheng, M., "Impact of Digital Nudging on Information Security Behavior: An Experimental Study on Framing and Priming in Cybersecurity," *Organizational Cybersecurity Journal: Practice, Process and People*, Vol. 1, No. 1, 2021, pp. 69-91. (Citation count 22)
- 67. Siau, K., Woo, C., Storey, V., Chiang, R., Chua, C., Beard, J., "Information Systems Analysis and Design: Past Revolutions, Present Challenges, and Future Research Directions," *Communications of the Association for Information Systems*, Vol. 50, Article 37, 2022, pp. 835-856. (Citation count 21)
- 68. Yang, Y., Siau, K., Xie, W., Sun, Y., "Smart Health: Intelligent Healthcare Systems in the Metaverse, Artificial Intelligence, and Data Science Era," *Journal of Organizational and End User Computing*, Vol. 34, No. 1, 2022, pp. 1-14. (Citation count 97)
- 69. Xie, X., Siau, K., Chen, C., "Does more investment in universities improve their performances? A Study on the performance of Chinese Universities using Data Envelopment Analysis," *Journal of Global Information Management*, Vol. 31, Issue 1, 2023, pp. 1-20. (Citation count 1)
- 70. Nah, F., Zheng, R., Cai, J., Siau, K., Chen, L., "Generative AI and ChatGPT: Applications, Challenges, and AI-Human Collaboration," *Journal of Information Technology Case and Application Research*, Vol. 25, No. 3, 2023, pp. 277-304. (Citation count 309)
- 71. Schiller, S., Nah, F., Luse, A., Siau, K., "Men Are from Mars and Women Are from Venus: Dyadic Collaboration in the Metaverse," *Internet Research*, Vol. 34, No. 1, 2024, pp. 149-173. (Citation count 12)
- 72. Wang, Y., Wang, L., Siau, K., "Human-Centered Interaction in Virtual Worlds: A New Era of Generative Artificial Intelligence and Metaverse," *International Journal of Human-Computer Interaction*, 2024. (forthcoming, Citation count 4)