Staff Profiles

Prof. Dr Zhaohao Sun, PhD

Professor of IT, School of Business, PNGUOT Editor-in-Chief of Interdisciplinary Journal of Papua New Guinea University of Technology



Prof. Zhaohao Sun

Dr. Sun graduated from Bond University Australia, University of Ballarat, Brandenburg Technical University Cottbus (TU Cottbus), Germany, and Hebei University, China with PhD, Graduate Cert. of Edu., MSc (Dipl.-Math.), MSc, and BSc respectively. Dr Sun is currently a full professor of Information Technology at School of Business, PNG University of Technology, Director of Research Centre of Big Data Analytics and Intelligent Systems (BAIS). Dr Sun is also the chair (Kezuo) professor of Hebei University of Science & Technology. He used to be an adjunct professor of the Federation University Australia, and a professor and an adjunct professor of Hebei Normal University, China. Dr Sun previously held academic positions at Hebei University, China; RWTH Aachen, TU Cottbus, Germany; Bond University, and the University of Wollongong, University of Ballarat, Australia. Prof. Sun is He is a senior member of IEEE and ACS, a distinguished member of AIS and a member of ACM.

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Areas of Expertise

Prof. Sun has effectively taught 46 different courses with high quality for all the levels of undergraduate/postgraduate students of IS, IT, CS, e-Commerce, Business Administration, Accounting, MBA, and EMBA in universities of Australia, China, and PNG. He is supervising a PHD student and M.Phil. student here at PNGUOT. He effectively supervised many PhD students, Master's research students, and honours students in Australia, Germany, and China. Prof. Sun is a world-class scholar in many fields including AI, Information Systems, business analytics, e-commerce, web services, business intelligence, data science, case-based reasoning, and intelligent systems. He published 12 books and over 180+ refereed papers in high-quality outlets, of them, are 60+ peer-reviewed research papers published in highly recognised journals including International Journal of Intelligent Systems (Wiley), Journal of Computer Information Systems (JCIS), Information Science (Elsevier), and Knowledge Base Systems (Elsevier), to name a few. His recent book is Sun Z (2024) Data Analytics for Business Intelligence: A Multi-industry Approach, is released by CRC press Routledge | Taylor & Francis Group, soon. One of his journal papers has been cited by 253+ based on Google Scholar. His publications have been indexed in the Clarivate Analytics (Web of Science, SCI, 53+), SCOPUS (88+), Normalized Average FWCI = 1.293, Semanticscholar (120+, h-index is 22, Highly Influential Citations 54+), Google Scholar (223+ publications with 2643+ citations) and the h-index is 26+, i10-index is 52+, Researchgate's Total Research Interest 3779+.

Current Teaching Areas at PNGUoT

- Data Management Systems (IS213)
- Information Systems Design Project (IS315)
- Management Information Systems (IS422)
- Cloud Computing (IS359)
- Project Management (IS326)
- Advanced Management Information Systems (MBA531)
- Managing ICT-Enabled Transformation (EMBA542)

Current Research/supervision Areas

- Artificial Intelligence
- Big Data Analytics and Business Analytics
- Intelligent Systems
- Data Science
- Business Intelligence

- Cloud Computing
- CyberPrivacy and CyberSecurity
- Social Computing and Technologies
- Intelligent Techniques in E-Commerce and Web Services
- Case-based reasoning (CBR)

Received Grant from PNGSTS- science & technologty Secretariat (2022-24):

Big Data Analytics Driven Socio-economic Development in Papua New Guinea

Recent Publications (Selected from books, Journal articles, Conference Papers and Book Papers)

- [1] Sun Z (2024) Data Analytics for Business Intelligence: A Multi-industry Approach, is released by CRC press Routledge | Taylor & Francis Group
- [2] Sun Z (Eds) (2022), Driving Socioeconomic Development with Big Data: Theories, Technologies, and Applications, IGI-Global. 401 pages.
- [3] Sun Z and Wu Z (Eds) (2022) Handbook of Research on Foundations and Applications of Intelligent Business Analytics, IGI-Global, USA, 460 pages.
- [4] Sun Z & Wang P.P (2021) The Scientification of China. Cambridge Scholars Publishing, UK, 360 pages.
- [5] Sun Z (Eds 2021) Intelligent Analytics with Advanced Multi-industry Applications. IGI-Global, USA. 392 pages.
- [6] Sun Z (Eds 2019) Managerial Perspectives on Intelligent Big Data Analytics. IGI-Global, Hershey, USA, 335 pages.
- [7] Huo Y & Sun Z (2019) China's Socioeconomic Transformation: A Perspective of Grassroots, Lambert Academic Publishing (https://www.lap-publishing.com/), 192 pages, ISBN 978-620-0-27684-1 translated into German, Spanish, Italian, Portuguese, and French version by 2023.
- [8] Zhaohao Sun (2024) Big Data 4.0: The Era of Big Intelligence, Journal of Computer Science Research 6(1):1-15
- [9] Zhaohao Sun (2023) Data, Analytics, and Intelligence, Journal of Computer Science Research; 5(4):43-57
- [10] Zhaohao Sun (2023) Similarity Intelligence: Similarity Based Reasoning, Computing, and Analytics. Journal of Computer Science Research (Singapoure), 5(3): 1-14.
- [11] Ken Strang & Zhaohao Sun (2022) ERP Staff versus AI Recruiters using Employment Real-Time Big Data, Discover Artificial Intelligence, 2(21): https://doi.org/10.1007/s44163-022-00037-1.
- [12] Zhaohao Sun (2022) Problem-driven computing and analytics, International Journal of Future Computer and Communications 11 (3): 52-60.
- [13] Zhaohao Sun (2022) A mathematical theory of big data. Journal of Computer Science Research 4(2): 13-23.
- [14] Sun Z, P Pinjik & F Pambel (2021) Business case mining and E-R modeling optimization, Studies in Engineering and Technology (Redfame Publishing, USA). 8(1): 53-66.
- [15] Sun Z, & Huo Y (2021) The spectrum of big data analytics. Journal of Computer Information Systems 61(2): 154-162.
- [16] Sun Z (2020) A service-oriented foundation for big data. International Journal of Systems and Service Oriented Engineering, 10(1): 1-17.
- [17] Sun Z, & Huo Y (2020) Intelligence without Data. Global Journal of Computer Science and Technology C: Software & Data Engineering, 20(1): 25-35.
- [18] Sun Z, Strang KD, & F Pambel (2020) Privacy and security in the big data paradigm, Journal of Computer Information Systems. 60(2): 146-155.
- [19] Strang, K., & Sun, Z. (2020). Hidden big data analytics issues in the healthcare industry. Health Informatics Journal (SAGE) 2020, 26(2), pp. 981-998.
- [20] Sun, Z; Sun, L; Strang, K (2018) Big Data Analytics Services for Enhancing Business Intelligence, Journal of Computer Information Systems (JCIS), 58(2):162-169. DOI:10.1080/08874417.2016.1220239.
- [21] Sun Z, Wang PP (2017) A Mathematical Foundation of Big Data. Journal of New Mathematics and Natural Computation. 13(2): 83-99.

- [22] Sun Z, Wang PP (2017) Big Data, Analytics and Intelligence: An Editorial Perspective, Journal of New Mathematics and Natural Computation.13(2): 75–81.
- [23] Strang KD & Sun Z (2017) Big Data Paradigm: What is the Status of Privacy and Security? Annals of Data Science (Springer). 4(1): 1–17.
- [24] Sun Z, Strang D. K, & Firmin S (2017) Business Analytics-Based Enterprise Information Systems, Journal of Computer Information Systems (JCIS), 57(2): 169-178.
- [25] Strang D. K, & Sun Z (2017) Analyzing relationships in terrorism big data using Hadoop and statistics. Journal of Computer Information Systems, 57(1): 67-75.
- [26] Zhaohao Sun, K. D Strang, Z. Wu (2022) Driving Digital Services with Big Data Analytics. The 6th International Conference on Big Data Research (ICBDR 2022), Harbin, China, Aug. 11-13, 2022, ACM Proceedings, pp.42-27.
- [27] Desmond Narongou, Zhaohao Sun (2022) Driving Sustainable Airport Business with Big Data Analytics Services: A Multichannel Approach. The 6th International Conference on Big Data Research (ICBDR 2022), Harbin, China, Aug. 11-13, 2022, ACM Proceedings, pp.48-54.
- [28] Sun, Z & Wu, Z., (2021). A Strategic Perspective on Big Data Driven Socioeconomic Development. In 2021 the 5th International Conference on Big Data Research (ICBDR) (ICBDR 2021), September 25–27, 2021, Tokyo, Japan. ACM, New York, NY, USA, pp.35-41.
- [29] Sun, Z (2023) Demand-driven services, In Sun, Z (2023) Demand-driven services, In Faïz Gallouj, Camal Gallouj, Marie-Christine Monnoyer, Luis Rubalcaba, and Markus Scheuer (eds) Encyclopedia of Services, pp. 74-77, Elgar Encyclopedia,
- [30] Zhaohao Sun (2022) A Service-Oriented Foundation for Big Data, In book: Research Anthology on Big Data Analytics, Architectures, and Applications, IGI-Global. pp.869-887.
- [31] Sun, Z, Wu, Z, & Strang, K. (2022) Big Data Driving Socio-economic Development: an interdisciplinary Approach. in Sun Z, Driving Socioeconomic Development with Big Data: Theories, Technologies, and Applications, IGI-Global, IGI-Global, pp.1-21.
- [32] Narongou D. & Sun Z. (2022) Enhancing Airport Business Services Using Big Data Analytics, in Sun Z, Driving Socioeconomic Development with Big Data, pp. 104-127.
- [33] Sun Z, Pambel F & Wu, Z, (2022) The Elements of Intelligent Business Analytics: Principles, Techniques, and Tools, in Sun Z & Wu Z (2022) Handbook of Research on Foundations and Applications of Intelligent Business Analytics. IGI-Global, USA, pp. 1-20.
- [34] Andrew Stranieri and Zhaohao Sun (2022) A Process-Oriented Framework for Regulating Artificial Intelligence Systems. in Sun Z & Wu Z (2022) Foundations and Applications of Intelligent Business Analytics, IGI-Global, USA. pp. 96-112.
- [35] Narongou D & Sun Z (2022) Big data analytics for smart airport management, in Sun Z & Wu Z (2022) Foundations and Applications of Intelligent Business Analytics, IGI-Global, USA. pp. 216-237.
- [36] Zhaohao Sun and Andrew Stranieri (2021) The Nature of Intelligent Analytics.