Curriculum Vitae

Dr Carmen Kar Hang Lee

Senior Lecturer, Business Analytics Programme
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Education Qualifications

2015	PhD in Industrial and Systems Engineering, The Hong Kong Polytechnic University
2010	Bachelor of Engineering (First Class Honours), The Hong Kong Polytechnic University

Academic and Professional Experience

2022 - Present	Senior Lecturer, Singapore University of Social Sciences, Singapore
2018 - 2021	Lecturer, Singapore University of Social Sciences, Singapore
2018	Visiting Research Scholar, The University of York, United Kingdom
2015 - 2018	Honorary Assistant Professor and Research Officer, The University of Hong Kong, Hong Kong

Memberships and Professional Activities

2022 - Present	Member, INFORMS
2021 - Present	Editorial board member of Journal of Industrial and Production Engineering
2015 - Present	Associate Editor of International Journal of Engineering Business Management

Research Interests

- Data analytics for operations and supply chain management, decision support systems in production, social media analytics in the sharing economy

Selected Publications

Refereed Journal Articles:

[CABS = Grade 3/4/4* journals in CABS (UK) list]

[ABDC = A/A* journals in ABDC (Australia) list]

- **Lee, C.K.H.**, Leung, E.K.H., Tse, Y.K. & Tsao, Y.C. (2024), "Investigating collision patterns to support autonomous driving safety", *Enterprise Information Systems*, Vol. 18, No. 2, 2243460. **[ABDC]**
- **Lee, C.K.H.** & Leung, E.K.H. (2023), "Spatiotemporal analysis of bike-share demand using DTW-based clustering and predictive analytics", *Transportation Research Part E: Logistics and Transportation Review*, Vol. 180, 103361. **[CABS, ABDC]**
- **Lee, C.K.H.**, Tse, Y.K., Zhang, M. & Wang, Y. (2023), "What have hosts overlooked for improving stay experience in accommodation-sharing? Empirical evidence from Airbnb customer reviews", *International Journal of Contemporary Hospitality Management*, Vol. 35, No. 2, pp. 765-784. **[CABS, ABDC]**
- **Lee, C.K.H.** & Wu, K.Y.K. (2023), "Making autonomous vehicle systems human-like: lessons learned from accident experiences in traffic", *Enterprise Information Systems*, Vol. 17, No. 6, 1998641. **[ABDC]**
- **Lee, C.K.H.** & Leung, E.K.H. (2022). "Designing predictive models for customer recommendations during COVID-19 in the airline industry", *IEEE Transactions on Engineering Management*, DOI: 10.1109/TEM.2022.3211767. **[CABS, ABDC]**
- **Lee, C.K.H.** (2022), "How guest-host interactions affect consumer experiences in the sharing economy: New evidence from a configurational analysis based on consumer reviews", *Decision Support Systems*, Vol. 152, 113634. **[CABS, ABDC]**
- Leung, E.K.H., **Lee, C.K.H.** & Ouyang, Z. (2022), "From traditional warehouses to Physical Internet hubs: A digital twin-based inbound synchronization framework for PI-order management", *International Journal of Production Economics*, Vol. 244, 108353. **[CABS, ABDC]**
- **Lee, C.K.H.** & Wong, A.O.M. (2021), "Antecedents of consumer loyalty in ride-hailing", *Transportation Research Part F: Traffic Psychology and Behaviour*, Vol. 80, pp. 14-33. **[ABDC]**
- **Lee, C.K.H.**, Tse, Y.K., Ho, G.T.S. & Chung, S.H. (2021), "Uncovering insights from healthcare archives to improve operations: An association analysis for cervical cancer screening", *Technological Forecasting and Social Change*, Vol. 162, 120375. **[CABS, ABDC]**
- **Lee, C.K.H.**, Law, K.M.Y., & Ip, A.W.H. (2021), "A rule-based quality analytics systems for the global wine industry", *Journal of Global Information Management*, Vol. 29, No. 3, pp. 256-273. **[ABDC]**
- **Lee, C.K.H.** & Tse, Y.K. (2021), "Improving peer-to-peer accommodation service based on text analytics", *Industrial Management & Data Systems*, Vol. 121, No. 2, pp. 209-227. **[ABDC]**
- Wang, Q., Xue, X., Yang, D. & **Lee, C.K.H.** (2021), "Internal control system and mechanism of Chinese listed companies: an empirical study", *Enterprise Information Systems*, Vol. 15, No. 1, pp. 105-130. **[ABDC]**
- **Lee, C.K.H.**, Tse, Y.K., Zhang, M. & Ma, J. (2019), "Analysing online reviews to investigate customer behaviour in the sharing economy: The case of Airbnb", *Information Technology & People*, Vol. 33, No. 3, pp. 945-961. **[CABS, ABDC]**
- **Lee, C.K.H.** (2019), "A knowledge-based product development system in the chemical industry", *Journal of Intelligent Manufacturing*, Vol. 30, No. 3, pp. 1371-1386.
- **Lee, C.K.H.**, Luk, C.C., Choy, K.L., Lam, H.Y., Lee, C.K.M., Tsang, Y.P., Ho, G.T.S. (2019), "Using fuzzy-based association rule mining to improve production systems for chemical product development", *International Journal of Productivity and Quality Management*, Vol. 26, No. 4, pp. 446-468.

- **Lee, C.K.H.** (2018), "A review of applications of genetic algorithms in operations management", *Engineering Applications of Artificial Intelligence*, Vol. 76, pp. 1-12.

- **Lee, C.K.H.** (2017), "A GA-based optimisation model for big data analytics supporting anticipatory shipping in Retail 4.0", *International Journal of Production Research*, Vol. 55, No. 2, pp. 593-605. **[CABS, ABDC]**

- Choy, K.L., Ho, G.T.S. & **Lee, C.K.H.** (2017), "A RFID-based storage assignment system for enhancing the efficiency of order picking", *Journal of Intelligent Manufacturing*, Vol. 28, No. 1, pp. 111-129.

- Choy, K.L., Ho, G.T.S., **Lee, C.K.H.**, Lam, H.Y., Cheng, S.W.Y., Siu, P.K.Y., Pang, G.K.H., Tang, V., Lee, J.C.H. & Tsang, Y.P. (2016), "A recursive operations strategy model for managing sustainable chemical product development and production", *International Journal of Production Economics*, Vol. 181, pp. 262-272. **[CABS, ABDC]**

- **Lee, C.K.H.**, Choy, K.L., Ho, G.T.S. & Lin, C. (2016), "A cloud-based responsive replenishment system in a franchise business model using a fuzzy logic approach", *Expert Systems*, Vol. 33, No. 1, pp. 14-29.

- **Lee, C.K.H.**, Tse, Y.K., Ho, G.T.S. & Choy, K.L. (2015), "Fuzzy association rule mining for fashion product development", *Industrial Management & Data Systems*, Vol. 115, No. 2, pp. 383-399. **[ABDC]**

- Wong, D.W.C., Choy, K.L., Lin, C., Lam, H.Y., **Lee, C.K.H.**, Chow, H.K.H. & Pang, G.K.H. (2015), "An intelligent battery information management system to support information sharing and vehicle routing planning for battery distribution in Hong Kong", *International Journal of Innovation and Sustainable Development*, Vol. 9, No. 1, pp. 1-27.

- **Lee. C.K.H.**, Choy, K.L. & Chan, Y.N. (2014). "A knowledge-based ingredient formulation system for chemical product development in the personal care industry", *Computers & Chemical Engineering*, Vol. 65, pp. 40-53.

- **Lee, C.K.H.**, Choy, K.L., Law, K.M.Y. & Ho, G.T.S. (2014), "Application of intelligent data management in resource allocation for effective operation of manufacturing systems", *Journal of Manufacturing Systems*, Vol. 33, No. 3, pp. 412-422.

- **Lee, C.K.H.**, Choy, K.L., Ho, G.T.S. & Pang, G.K.H. (2014), "A RFID-based recursive process mining system for quality assurance in the garment industry, *International Journal of Production Research*, Vol. 52, No. 14, pp. 4216-4238. **[CABS, ABDC]**

- **Lee, C.K.H.**, Choy, K.L., Ho, G.T.S., Chin, K.S., Law, K.M.Y. & Tse, Y.K. (2013), "A hybrid OLAP-association rule mining based quality management system for extracting defect patterns in the garment industry", *Expert Systems with Applications*, Vol. 40, No. 7, pp. 2435-2446.

- **Lee, C.K.H.**, Choy, K.L., Ho, G.T.S. & Law, K.M.Y. (2013), "A RFID-based Resource Allocation System for garment manufacturing", *Expert Systems with Applications*, Vol. 40, No. 2, pp. 784-799.

- Wong, D.W.C., Chow, H.K.H., Choy, K.L., Lam, H.Y., **Lee C.K.H.** & Zhang X. (2012), "An Intelligent vehicle management system for reducing greenhouse gas emission - a case study of hybrid vehicle engine", *International Journal of Innovation and Sustainable Development*, Vol. 6, No. 4, pp. 347-367.

- Lao, S.I., Choy, K.L., Ho, G.T.S., Tsim, Y.C. & **Lee, C.K.H.** (2011), "Real-time inbound decision support system for enhancing the performance of a food warehouse", *Journal of Manufacturing Technology Management*, Vol. 22, No. 8, pp. 1014-1031.

Conference Papers:

- **Lee, C.K.H.** (2023), "Predicting food safety violations via social media to improve public health surveillance", In *Proceedings of the 10th European Conference on Social* Media, May 2023, Krakow, Poland, pp. 109-116.

- **Lee, C.K.H.** & Wong, A.O.M. (2019), "Consumer engagement and purchase intention in ride-hailing", In *Proceedings of Australian and New Zealand Marketing Academy Conference*, December 2019, Wellington, New Zealand, pp. 1100-1103.

- **Lee, C.K.H.** & Law, K.M.Y. (2019), "An IoT-based quality analytics system using constrained-rule learning algorithm: A case in the wine industry", In *Proceedings of International Conference on Decision Science & Management*, September 2019, Changsha, China.

- Law, K.M.Y. & **Lee, C.K.H.** (2019), "An intelligent replenishment system for the pharmaceutical supply chain", In *Proceedings of International Conference on Decision Science & Management*, September 2019, Changsha, China.

- Wong, A.O.M. & **Lee, C.K.H.** (2019), "Consumers' Perception of Social Media Brand Community Engagement", In *Proceedings of International Conference on Business, Economics, Finance and Management*, June 2019, Hong Kong, China, pp. 133-135.

- **Lee, C.K.H.**, Choy, K.L., Ho, G.T.S., Cheng, S.W.Y., Lam, C.H.Y., Lee, J.C.H. & Huang, Y. (2015), "Development of a fuzzy-rule based system for product development in the garment industry", In *Proceedings of Portland International Center for Management Engineering and Technology: Technology Management for Emerging Technologies, PICMET'15*, August 2015, U.S.A., pp. 1676-1686.

- Leung, K.H., Choy, K.L., Tam, M.C., Lam, C.H.Y., **Lee, C.K.H.**, & Cheung, S.W.Y. (2015), "A hybrid RFID case-based system for handling air cargo storage location assignment operations in distribution centers", In *Proceedings of Portland International Center of Management Engineering and Technology: Technology Management for Emerging Technologies, PICMET'15*, August 2015, Portland, U.S.A., pp. 1859-1868.

- Hui, Y.Y.Y., Choy, K.L., Ho, G.T.S., Lam, C.H.Y., **Lee, C.K.H.**, & Cheung, S.W.Y. (2015), "An intelligent fuzzy-based storage assignment system for packaged food warehousing", In *Proceedings of Portland International Center of Management Engineering and Technology: Technology Management for Emerging Technologies, PICMET'15*, August 2015, Portland, U.S.A., pp. 1869-1878.

- Choy, K.L., Lam, C.H.Y., **Lee, C.K.H.** & Lin, C. (2013), "A hybrid decision support system for storage location assignment in the fast-fashion industry", In *Proceedings of Portland International Center for Management Engineering and Technology: Technology Management for Emerging Technologies, PICMET'13*, August 2013, Portland, U.S.A., pp. 468-473.

- **Lee, C.K.H.**, Choy, K.L., Law, K.M.Y. & Ho, G.T.S. (2012), "An intelligent system for production resources planning in Hong Kong garment industry", In *Proceedings of International Conference on Industrial Engineering and Engineering Management, IEEM'12*, December 2012, Hong Kong, China, pp. 889-893.

- **Lee, C.K.H.**, Choy, K.L., Law, K.M.Y. & Ho, G.T.S. (2012), "Decision support system for sample development in the Hong Kong garment industry", In *Proceedings of Portland International Center for Management Engineering and Technology: Technology Management for Emerging Technologies, PICMET'12*, August 2012, Vancouver, Canada, pp. 754-761.

Book Chapter:
- Choy, K.L., To, K.M., Ning, A., **Lee, C.K.H.** & Leung, W.K. (2015), "A Fabric Resource Management System (FRMS) for Fashion Product Development". In M. Khosrow-Pour. (Ed.) *Encyclopedia of Information Science and Technology*, Third Edition (pp.710-720), USA: IGI Global.

Research Grants
- SUSS Internal Seed Fund, "Leveraging social media data to support public health policy by predicting food safety violations in food service establishments", Principal Investigator, Project Amount: 18,000SGD, Project Code: RF00015.
- MOE Start-up Fund, "Social robot as companion for older adults", Co-Investigator, Project Amount: 147,000SGD, Project Code: RF100181.