

# Associate Professor Rajan Kadel, Ph.D.

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## Research Publications

### Journal Articles

- 1 Gnawali, K. R., & **Kadel, R.** (2025). Defection Analysis of Post-Paid Telephone Customers in Nepal Using the Weibull Model. *Businesses*, 5(1).  doi:10.3390/businesses5010006
- 2 Guruge, D. B., Kadel, R., Shailendra, S., & Sharma, A. (2025). Building academic integrity: Evaluating the effectiveness of a new framework to address and prevent contract cheating. *Societies*, 15(1), 11.
- 3 Kwan, P., Kadel, R., Memon, T. D., & Hashmi, S. S. (2025). Reimagining flipped learning via bloom's taxonomy and student–teacher–genai interactions. *Education Sciences*, 15(4).  
 doi:10.3390/educsci15040465
- 4 Saxena, U. R., & Kadel, R. (2025). A service recommendation model in cloud environment based on trusted graph-based collaborative filtering recommender system. *Network*, 5(2), 19.
- 5 Saxena, U. R., Khatri, Y., Kadel, R., & Samar, S. (2025). RACHEIM: Reinforced Reliable Computing in Cloud by Ensuring Restricted Access Control. *Network*. Accepted for publication.
- 6 Shrestha, R., Kadel, R., Shakya, S., Nyachhyon, N., & Mishra, B. K. (2025). Awareness and understanding of climate change for environmental sustainability using a mix-method approach: A study in the kathmandu valley. *Sustainability*, 17(7).  doi:10.3390/su17072819
- 7 Shailendra, S., Kadel, R., & Sharma, A. (2024). Framework for Adoption of Generative Artificial Intelligence (GenAI) in Education. *IEEE Transactions on Education*.
- 8 Guruge, D. B., & **Kadel, R.** (2023). Towards an holistic framework to mitigate and detect contract cheating within an academic institute—a proposal. *Education Sciences*, 13(2), 148.  
 doi:<https://doi.org/10.3390/educsci13020148>
- 9 Shrestha, R., **Kadel, R.**, & Mishra, B. K. (2023). A two-phase confirmatory factor analysis and structural equation modelling for customer-based brand equity framework in the smartphone industry. *Decision Analytics Journal*, 100306. Retrieved from  <https://doi.org/10.1016/j.dajour.2023.100306>
- 10 Kwan, P., Memon, T. D., Hashmi, S. S., Rhode, F., & **Kadel, R.** (2022). An empirical study of student's perception of and key factors affecting overall satisfaction in an intensive block mode and flipped classroom. *Education Sciences*, 12(8).  doi:10.3390/educsci12080535
- 11 Paudel, K., **Kadel, R.**, & Guruge, D. B. (2022). Machine-learning-based indoor mobile positioning using wireless access points with dual ssids—an experimental study. *Journal of Sensor and Actuator Networks*, 11(3).  doi:10.3390/jsan11030042
- 12 Aziz, S., **Kadel, R.**, Guruge, D. B., Paudel, K., & Karagiannidis, V. (2021). [Mobile learning approaches and its impact on student's education—A survey](#). *International Journal of Information and Education Technology*, 11(9), 429–435.
- 13 Guruge, D. B., **Kadel, R.**, & Halder, S. J. (2021). The state of the art in methodologies of course recommender systems—a review of recent research. *Data*, 6(2).  doi:10.3390/data6020018
- 14 Islam, N., Rashid, M. M., Pasandideh, F., Ray, B., Moore, S., & **Kadel, R.** (2021). A review of applications and communication technologies for internet of things (iot) and unmanned aerial vehicle (uav) based sustainable smart farming. *Sustainability*, 13(4).  doi:10.3390/su13041821

- 15 **Kadel**, R., Paudel, K., Guruge, D. B., & Halder, S. J. (2020). Opportunities and challenges for error control schemes for wireless sensor networks: A review. *Electronics*, 9(3).  
🔗 doi:10.3390/electronics9030504
- 16 **Kadel**, R., Islam, N., Ahmed, K., & Halder, S. J. (2019). Opportunities and challenges for error correction scheme for wireless body area network—a survey. *Journal of Sensor and Actuator Networks*, 8(1).  
🔗 doi:10.3390/jsan8010001

## Conference Proceedings

- 1 **Kadel**, R., Samar, S., & Saxena, U. R. (2025). Navigating the New Landscape: A Conceptual Model for Project-Based Assessment (PBA) in the Age of GenAI. In *2025 World Engineering Education Forum - Global Engineering Deans Council (WEEF-GEDC)*. Accepted for publication.
- 2 Kozhipuram, A. V., Shailendra, S., & Kadel, R. (2025). Navigating Education with Large Language Models (LLMs): A Review. 🔗 doi:10.36227/techrxiv.175338595.55874368/v1
- 3 Sharma, A., Shailendra, S., & Kadel, R. (2025). Experiences with content development and assessment design in the era of genai. In *2025 6th international conference on computer science, engineering, and education (csee)* (pp. 1–5). 🔗 doi:10.1109/CSEE64583.2025.00008
- 4 **Kadel**, R., Mishra, B. K., Shailendra, S., Abid, S., Rani, M., & Mahato, S. P. (2024). Crafting tomorrow's evaluations: Assessment design strategies in the era of generative ai. In *2024 international symposium on educational technology (iset)* (pp. 13–17). 🔗 doi:10.1109/ISET61814.2024.00012
- 5 Tahidul, I. M., Shailendra, S., & Kadel, R. (2024). Analysis of energy consumption and efficiency in the two-tier network for lora and lr-fhss iot sensor communication. In *2024 international conference on innovations in science, engineering and technology (iciset)* (pp. 1–5).  
🔗 doi:10.1109/ICISET62123.2024.10939423
- 6 **Kadel**, R., & Lechner, G. (2023). **Full diversity low-density parity-check (LDPC) codes for block-fading channel**. In *2023 International conference on electronics, information, and communication (ICEIC)* (pp. 1–5). IEEE.
- 7 B. Guruge, D., Paudel, K., **Kadel**, R., Aziz, S., & Karagiannidis, V. (2021). **Analysing student expectation on mobile technologies to enhance student learning experience**. In *2021 2nd international conference on education development and studies* (pp. 45–49).
- 8 Gurung, M. P., Paudel, K., & **Kadel**, R. (2020). **Comparative analysis of popular digital assessment tools for formative assessment on networking courses**. In *14th international technology, education and development conference*. IATED.
- 9 Odewole, T., & Kadel, R. (2020). **Smart attendance system in an enterprise-based access point environment**. In *2020 30th international telecommunication networks and applications conference (itnac)* (pp. 1–6). IEEE.
- 10 Banepali, A., **Kadel**, R., Guruge, D. B., & Halder, S. J. (2019). **Design and implementation of wi-fi based attendance system using raspberry pi**. In *2019 29th international telecommunication networks and applications conference (ITNAC)* (pp. 1–6). IEEE.
- 11 **Kadel**, R., Paudel, K., & Gurung, M. P. (2019). **A review on educational games design, development and effectiveness measurement**. In *2019 ieee international conference on engineering, technology and education (TALE)* (pp. 1–7). IEEE.
- 12 Li, S., & **Kadel**, R. (2019). **Design of a hybrid RFID-WLAN based smart parking and vehicle finding system**. In *2019 cybersecurity and cyberforensics conference (CCC)* (pp. 56–61). IEEE Computer Society.
- 13 Gurung, M. P., & **Kadel**, R. (2018). **Efficacy of moodle forum in teaching and learning**. In *The Asian conference on education 2018 official conference proceedings*.

- 14 **Kadel**, R., Halder, S. J., Paudel, K., & Gurung, M. P. (2018). *Analyzing effect of GBL on student engagement and academic performance in computer networking course*. In *Proceedings of the 20<sup>th</sup> International conference on information integration and web-based applications & services* (pp. 143–145).
- 15 **Kadel**, R., & Islam, N. (2018). *Comparison of channel models for wireless body area networks (WBANS)*. In *2018 IEEE conference on wireless sensors (ICWiSe)* (pp. 77–82). IEEE.
- 16 **Kadel**, R., Ahmed, K., & Nepal, A. (2017). *Adaptive error control code implementation framework for software defined wireless sensor network (SDWSN)*. In *2017 27<sup>th</sup> International telecommunication networks and applications conference (ITNAC)* (pp. 1–6). IEEE.
- 17 **Kadel**, R., & Lechner, G. (2013). *Repeat-accumulate codes for block-fading channels*. In *2013 Australian communications theory workshop (AUSCTW)* (pp. 37–42). IEEE.
- 18 **Kadel**, R., & Lechner, G. (2012). *Full diversity binary message-passing decoders for block fading channels*. In *2012 Australian communications theory workshop (AUSCTW)* (pp. 66–71). IEEE.

## Book Chapter

- 1 **Kadel**, R., Paudel, K., Shrestha, R., & Shailendra, S. (2024). Digital Twin: Towards Future Smartness. (Chap. Accepted for publication). The Institute of Engineering and Technology.
- 2 Kwan, P., **Kadel**, R., Memon, T. D., & Hashmi, S. S. (2024). Intensifying learner engagement and focus by a block mode flipped learning pedagogy. (Chap. Accepted for publication). Nova Science Publishers, Inc.

## Technical Report

- 1 **Kadel**, R. (2023). *Analyzing the prospects of 5G technology in Nepal: An in-depth comparative analysis of socio-economic advantages realized by other nations through its adoption*, Deloitte Consulting, USAID Trade and Competitiveness Activity, Kathmandu, Nepal.

## Theses

- 1 **Kadel**, R. (2013). Full-diversity codes for block-fading channels. University of South Australia. PhD Thesis.
- 2 **Kadel**, R. (2007). Decoder Design and Implementation on FPGA for Small UAVs. University of Gävle. Master Thesis.