Designing immersive information systems in the era of artificial intelligence

Abstract

Immersive information systems may shape end users' perceptions of reality. Immersive information systems employ such information and communication technologies as augmented reality (AR), virtual reality (VR), and gamification [2]. Scholars have identified the application potential of AR/ VR in several fields that range from medical applications [4], education [5], manufacturing [1], and retail [6]. The keynote speech will discuss the design challenges of immersive information systems from both engineering/ technological and user adoption examination stances. Furthermore, the keynote speech will discuss how extant information systems design science research perspectives (e.g. information systems design theories) may be employed for capturing the design elements of immersive information systems by emphasizing on the design of AR/ mobile-AR applications [3] and, in general, AR/ VR augmented intelligence immersive systems.

References

- 1. Baroroh, D.K., Chu, C.H., Wang, L. Systematic literature review on augmented reality in smart manufacturing: Collaboration between human and computational intelligence, *Journal of Manufacturing Systems*, Vol. 61, pp. 696-711. (2021)
- 2. Cavusoglu, H., Dennis, A.R., Parsons, J. Editorial of Special Issue: Immersive Systems, *Journal of Management Information Systems*, Vol. 36 No. 3, pp. 680-682. (2019)
- 3. Kourouthanassis, P.E., Boletsis, C., Lekakos, G. Demystifying the design of mobile augmented reality applications, *Multimedia Tools and Applications*, Vol. 74, pp. 1045-1066. (2015)
- 4. Lungu, A.J., Swinkels, S., Claesen, L., Tu, P., Egger, J., Chen, X. A review on the applications of virtual reality, augmented reality and mixed reality in surgical simulation: An extension to different kinds of surgery, *Expert Review of Medical Devices*, Vol. 18 No. 1, pp. 47-62. (2021)
- 5. Videnovik, M., Trajkovik, V., Kiønig, L.V., Vold, T. Increasing quality of learning experience using augmented reality educational games. *Multimedia Tools and Applications*, Vol. 79, pp. 23861–23885. (2020)
- 6. Zimmermann, R., Mora, D., Cirqueira, D., Helfert, M., Bezbradica, M., Werth, D., Weitzl, W.J., Riedl, R., Auinger, A. Enhancing brick-and-mortar store shopping experience with an augmented reality shopping assistant application using personalized recommendations and explainable artificial intelligence, *Journal of Research in Interactive Marketing*, Vol. 17 No. 2, pp. 273-298. (2023)