References

[1] Grieves M., Vickers J. (2017). Digital Twin: Mitigating Unpredictable, Undesirable Emergent Behavior in Complex Systems. In: Kahlen FJ., Flumerfelt S., Alves A. (eds) Transdisciplinary Perspectives on Complex Systems. Springer, Cham

[2] Glaessgen EH, Stargel D (2012). The digital twin paradigm for future NASA and US Air Force vehicles. In: 53rd Structures, structural dynamics, and materials conference: special session on the digital twin. Honolulu, HI, US pp 1–14. IOP Publishing Physics. https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20120008178

[3] Grieves M. (2014). Digital twin: manufacturing excellence through virtual factory replication. White paper. Ameritech Corporation, Chicago

[4] Zhuang C, Liu J, Xiong H et al (2017). Connotation, architecture and trends of product digital twin. Comput Integr Manuf Syst 23(4):753–768

[5] David Jones, Chris Snider, Aydin Nassehi, Jason Yon, Ben Hicks, (2020). Characterising the Digital Twin: A systematic literature review, CIRP Journal of Manufacturing Science and Technology.

[6] Jay Lee, Edzel Lapira, Behrad Bagheri, Hung-an Kao (2013). Recent advances and trends in predictive manufacturing systems in big data environment, Manufacturing Letters, 1(13), 38-41.

[7] Y. Xu, Y. Sun, X. Liu and Y. Zheng. (2019). "A Digital-Twin-Assisted Fault Diagnosis Using Deep Transfer Learning," in *IEEE Access*, 7, 19990-19999.

[8] F. Tao, H. Zhang, A. Liu and A. Y. C. Nee. (2019). "Digital Twin in Industry: State-of-the-Art," in *IEEE Transactions on Industrial Informatics*, 15(4), 2405-2415.

[9] El Saddik A. (2018). "Digital Twins: The Convergence of Multimedia Technologies," in IEEE MultiMedia, 25(2), 87-92.

[10] Bruynseels Koen, Santoni de Sio Filippo, van den Hoven Jeroen. (2018). Digital Twins in Health Care: Ethical Implications of an Emerging Engineering Paradigm, Frontiers in Genetics, 9.

[11] Y. Liu et al. (2019). "A Novel Cloud-Based Framework for the Elderly Healthcare Services Using Digital Twin," in IEEE Access, 7, 49088-49101.

[12] Jimenez J.I., Jahankhani H., Kendzierskyj S. (2020). Health Care in the Cyberspace: Medical Cyber-Physical System and Digital Twin Challenges. In: Farsi M., Daneshkhah A., Hosseinian-Far A., Jahankhani H. (eds) Digital Twin Technologies and Smart Cities. Internet of Things (Technology, Communications and Computing). Springer, Cham.

[13] Hafez W. (2020). Human Digital Twin: Enabling Human-Multi Smart Machines Collaboration. In: Bi Y., Bhatia R., Kapoor S. (eds) Intelligent Systems and Applications. IntelliSys 2019. Advances in Intelligent Systems and Computing, 1038. Springer, Cham

[14] B. R. Barricelli, E. Casiraghi, J. Gliozzo, A. Petrini and S. Valtolina. (2020). "Human Digital Twin for Fitness Management," in IEEE Access, 8, 26637-26664.

[15] A. Karakra, F. Fontanili, E. Lamine and J. Lamothe. (2019). "HospiT'Win: A Predictive Simulation-Based Digital Twin for Patients Pathways in Hospital," 2019 IEEE EMBS International Conference on Biomedical & Health Informatics (BHI), Chicago, IL, USA, 1-4.

[16] Schriber, T. J. and Brunner, D. T. (2007). How Discrete-Event Simulation Software Works. In Handbook of Simulation, J. Banks (Ed.)

[17] Rodríguez Ulloa R., y Paucar-Caceres, A. (2015). Soft System Dynamics Methodology: Combining Soft Systems Methodology and System Dynamics. System Practice and Action Research, 18(3).

[18] Borshchev, A. (2013). The big book of simulation modelling: Multimethod modelling with AnyLogic 6. Lisle, IL: AnyLogic North America.

[19] Mykoniatis, K., & Angelopoulou, A. (2020). A modelling framework for the application of multi-paradigm simulation methods. SIMULATION, 96(1), 55–73. https://doi.org/10.1177/0037549719843339

[20] A. Djanatliev and R. German. (2015). "Towards a guide to domain-specific hybrid simulation. " 2015 Winter Simulation Conference (WSC), Huntington Beach, CA, 2015, 1609-1620.

[21] A. Djanatliev and R. German. (2013). "Prospective healthcare decision-making by combined system dynamics, discrete-event and agent-based simulation," 2013 Winter Simulations Conference (WSC), Washington, DC, 2013, pp. 270-281.

[22] Anatoli Djanatliev and Reinhard German. (2013). Large scale healthcare modeling by hybrid simulation techniques using AnyLogic. In Proceedings of the 6th International ICST Conference on Simulation Tools and Techniques (SimuTools '13). ICST (Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering), Brussels, BEL, 248–257.

[23] A. Gao, N. D. Osgood, W. An and R. F. Dyck, (2014). "A tripartite hybrid model architecture for investigating health and cost impacts and intervention tradeoffs for diabetic end-stage renal disease," Proceedings of the Winter Simulation Conference 2014, Savanah, GA, 2014, pp. 1676-1687.