



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

IJARSCT

Volume 3, Issue 3, June 2023

IOT based Big Data Analytics for Smart Buildings:

A Survey

Anand R. Yadav

Late Bhausaheb Hiray S.S. Trust's Institute of Computer Application, Mumbai, India . University of Mumbai, Mumbai, India yandy33.ay@gmail.com

Abstract: The goal of the digital transformation procedures has been to increase productivity, safety, and execution quality, as well as to promote sustainable development, teamwork, and solutions for the sustainable smart city. The main digital developments are transforming the construction industry and exposing new trends for integrating information technologies. Systems for managing smart buildings today use a range of sensors, actuators, and dedicated networks. Their goals are to assess the state of particular places and implement the necessary regulations to maintain or enhance comfort while conserving energy. In this paper, we suggest a survey of IoT- and Big Data Analytics-related activities in smart buildings.

Keywords: IoT

REFERENCES

[1] Pasquale, L., C. Ghezzi, C. Menghi, C. Tsigkanos, and B. Nuseibeh, (2014) "Topology Aware Adaptive Security." Proc. of the 9th ACM Int. Symposium On Software Engineering for Adaptive and Self-Managing Systems: 43-48.

[2] Balaji B, Bhattacharya A, Fierro G, Gao J, Gluck J, Hong D, et al. Brick (2016) "Towards a unified metadata schema for buildings." Proceedings of the 3rd ACM international conference on systems for energy-efficient built environments. ACM: 41–50.

[3] Fierro G, Culler DE. Xbos (2015) "An extensible building operating system." Proceedings of the 2nd ACM international conference on embedded systems for energy-efficient built environments. ACM: 119–20.

[4] Mengda. J, (2019) "Automation in Construction" 101: 111–126 [5] B.L.R. Stojkoska, K.V. Trivodaliev (2017) "A review of Internet of Things for smart home: challenges and solutions" J. Clean. Prod. 140: 1454–1464.

[6] Asri, H., Mousannif, H., & amp; Al Moatassime, H. (2019) "Reality mining and predictive analytics for building smart applications." Journal of Big Data, 6: 66

[7] Subbarao, V., Srinivas, K., & amp; Pavithr, R. S. (2019) "A survey of IoT based smart, digital green and intelligent campus." 4th International Conference on Internet of Things: Smart Innovation and Usages (IoT-SIU): 1-6

[8] Hipwell, S. (2014) "A working model." International Conference on Intelligent Green Building and Smart Grid (IGBSG): 1–6.

[9] T.K. Hui, R.S. Sherratt, D.D. Sánchez, (2017) "Major requirements for building smart homes in smart cities based on internet of things technologies." Futur. Gener. Comput. Syst.76: 358–369.

[10] Gubbi. J, Buyya. R, Marusic. S, Palaniswami. M, (2013) "Internet of Things (IoT): a vision, architectural elements, and future directions." Futur. Gener. Comput. Syst: 1645–1660.

[11] Atzori. L, Iera. A, Morabito. G, (2010) "The internet of things: a survey." Comput. Netw. 54(15): 2787–2805.

[12] Bandyopadhyay. D, Sen. J, (2011) "Internet of things: applications and challenges in technology and standardization." Wirel. Pers. Commun. 58(1): 49–69.

[13] Whitmore. A, Agarwal. A, Da Xu. L, (2015) "The internet of things—a survey of topics and trends." Inf. Syst. Front. 17(2):261–274.

[14] Abdmeziem. M.R, Tandjaoui. D., Romdhani. I, (2016) "Architecting the internet of things:state of the art." Robots and Sensor Clouds, Springer, Cham: 55–75.

DOI: 10.48175/IJARSCT-11495

