









- [16] G. Kalyani and S. Chaudhari, "An efficient approach for enhancing security in Internet of Things using the optimum authentication key," *International Journal of Computers and Applications*, vol. 42, no. 3, pp. 306–314, 2020.
- [17] K. Mabodi *et al.*, "Multi-level trust- based intelligence schema for securing of internet of things (IoT) against security threats using cryptographic authentication," *The Journal of Supercomputing*, pp. 1–26, 2020.
- [18] A. Safi, (2017). Improving the security of internet of things using encryption algorithms. *International Journal of Computer and Information Engineering*, vol. 11, no. 5, pp. 558–561, 2017.
- [19] B. Mbarek, M. Ge, and T. Pitner, "An efficient mutual authentication scheme for internet of things," *Internet of Things*, vol. 9, 2020.
- [20] H. AlMajed and A. AlMogren, "A secure and efficient ECC-based scheme for edge computing and internet of things," *Sensors*, vol. 20, no. 21, 2020.

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