

showcased that the MBO-ABE technique pointed out the superior performance of the MBO-ABE technique over the recent state of art methods. In future, light weight authentication and block technologies can be incorporated to accomplish improved security in public cloud storage systems.

References

- [1] Awan, I.A., Shiraz, M., Hashmi, M.U., Shaheen, Q., Akhtar, R. and Ditta, A., 2020. Secure framework enhancing AES algorithm in cloud computing. *Security and Communication Networks*, 2020.
- [2] Mahmood, G.S., Huang, D.J. and Jaleel, B.A., 2019. Achieving an Effective, Confidentiality and Integrity of Data in Cloud Computing. *Int. J. Netw. Secur.*, 21(2), pp.326-332.
- [3] Othman, S. and Riaz, A.S., 2018. A user-based trust model for cloud computing environment. *International Journal of Advanced Computer Science and Applications*, 9(3).
- [4] Pradeep, K.V., Vijayakumar, V. and Subramaniaswamy, V., 2019. An efficient framework for sharing a file in a secure manner using asymmetric key distribution management in cloud environment. *Journal of Computer Networks and Communications*, 2019.
- [5] Kpelou, M. and Kishore, K., 2019. Lightweight security framework for data outsourcing and storage in mobile cloud computing. *International Journal of Recent Technology and Engineering*, 8(2).
- [6] Elgendy, I.A., Zhang, W.Z., Liu, C.Y. and Hsu, C.H., 2018. An efficient and secured framework for mobile cloud computing. *IEEE Transactions on Cloud Computing*, 9(1), pp.79-87.
- [7] Saha, R., Geetha, G., Kumar, G. and Kim, T.H., 2018. RK-AES: an improved version of AES using a new key generation process with random keys. *Security and Communication Networks*, 2018.
- [8] Ghosh, S. and Karar, V., 2018. Blowfish hybridized weighted attribute-based encryption for secure and efficient data collaboration in cloud computing. *Applied Sciences*, 8(7), p.1119.
- [9] Prathap, R. and Mohanasundaram, R., 2021. Enhancing security by two-way decryption of message passing of EMR in public cloud. *International Journal of Intelligent Enterprise*, 8(2-3), pp.239-250.
- [10] Deng, H., Qin, Z., Wu, Q., Guan, Z., Deng, R.H., Wang, Y. and Zhou, Y., 2020. Identity-based encryption transformation for flexible sharing of encrypted data in public cloud. *IEEE Transactions on Information Forensics and Security*, 15, pp.3168--3180.
- [11] Fun, T.S., Samsudin, A. and Zaaba, Z.F., 2017. Enhanced security for public cloud storage with honey encryption. *Advanced Science Letters*, 23(5), pp.4232-4235.
- [12] Shen, J., Deng, X. and Xu, Z., 2019. Multi-security-level cloud storage system based on improved proxy re-encryption. *EURASIP Journal on Wireless Communications and Networking*, 2019(1), pp.1-12.
- [13] Liu, P., 2020. Public-key encryption secure against related randomness attacks for improved end-to-end security of cloud/edge computing. *IEEE Access*, 8, pp.16750-16759.
- [14] Veeraragavan, N., Arockiam, L. and Manikandasaran, S.S., 2017, February. Enhanced encryption algorithm (EEA) for protecting users' credentials in public cloud. In 2017 International Conference on Algorithms, Methodology, Models and Applications in Emerging Technologies (ICAMMAET) (pp. 1-6). IEEE.
- [15] Krishnasamy, V. and Venkatachalam, S., 2021. An efficient data flow material model based cloud authentication data security and reduce a cloud storage cost using Index-level Boundary Pattern Convergent Encryption algorithm. *Materials Today: Proceedings*.
- [16] Song, Y., Wang, H., Wei, X. and Wu, L., 2019. Efficient attribute-based encryption with privacy-preserving key generation and its application in industrial cloud. *Security and Communication Networks*, 2019.
- [17] Horváth, M., 2015, January. Attribute-based encryption optimized for cloud computing. In *International Conference on Current Trends in Theory and Practice of Informatics* (pp. 566-577). Springer, Berlin, Heidelberg.
- [18] Feng, Y., Yang, J., Wu, C., Lu, M. and Zhao, X.J., 2018. Solving 0-1 knapsack problems by chaotic monarch butterfly optimization algorithm with Gaussian mutation. *Memetic Computing*, 10(2), pp.135-150.
- [19] Alweshah, M., Al Khalailah, S., Gupta, B.B., Almamari, A., Hammouri, A.I. and Al-Betar, M.A., 2020. The monarch butterfly optimization algorithm for solving feature selection problems. *Neural Computing and Applications*, pp.1-15.
- [20] Nagarajan, G. and Sampath Kumar, K., 2021. Security Threats and Challenges in Public Cloud Storage. *2021 International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE)*.
- [21] Nagarajan, G. (2021). Comparative Analysis of Public Cloud Security Based Schemes and Cryptographic Algorithms. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(13), 2114-2127.