

Image Stegnography

Prof. Bhagyashri S. Chaudhari¹, Madhuri M Gade², Sakshi S Ingale³, Bhakti K Gogawale⁴

Professor, Department of Computer Science and Engineering¹

Students, Department of Computer Science and Engineering^{2,3,4}

Navsahyadri Education Society's Group of Institutions, Polytechnic, Pune, Maharashtra, India

Abstract: *Steganography is the art of hiding the fact that communication is taking place, by hiding information in other information. Many different carrier file formats can be used, but digital images are the most popular because of their frequency on the internet. For hiding secret information in images, there exists a large variety of steganography techniques some are more complex than others and all of them have respective strong and weak points. Different applications may require absolute invisibility of the secret information, while others require a large secret message to be hidden. This project report intends to give an overview of image steganography, its uses and techniques. It also attempts to identify the requirements of a good steganography algorithm and briefly reflects on which steganographic techniques are more suitable for which applications.*

Keywords: Image steganography, steganalysis, hiding capacity, imperceptibility, security

REFERENCES

- [1] Wikipedia. (2020). Steganography. [Online]. Available: <https://en.wikipedia.org/wiki/Steganography>.
- [2] H. Shi, X.-Y. Zhang, S. Wang, G. Fu, and J. Tang, "Synchronized detection and recovery of steganographic messages with adversarial learning," in Proc. Int. Conf. Comput. Sci. Cham, Switzerland: Springer, 2019, pp. 31_x0015_43.
- [3] M. V. S. Tarun, K. V. Rao, M. N. Mahesh, N. Srikanth, and M. Reddy, "Digital video steganography using LSB technique," Red, vol. 100111, Apr. 2020, Art. no. 11001001.
- [4] S. S. M. Than, "Secure data transmission in video format based on LSB and Huffman coding," Int. J. Image, Graph. Signal Process., vol. 12, no. 1, p. 10, 2020.
- [5] M. B. Tuieb, M. Z. Abdullah, and N. S. Abdul-Razaq, "An efficiency, secured and reversible video steganography approach based on lest significant," J. Cellular Automata, vol. 16, no. 17, Apr. 2020.
- [6] H. M. Sidqi and M. S. Al-Ani, "Image steganography: Review study," in Proc. Int. Conf. Image Process., Comput. Vis., Pattern Recognit. (IPCV), 2019, pp. 134_x0015_140.