

College of Engineering Chengannur
Department of Computer Engineering
03CS6902 Mini Project
Abstract of Project Proposed
Deep Steganography: Hiding Images within Images

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June 7, 2021

Keywords: Information hiding, image verification, image trust

Abstract

Information hiding is a technique of hiding secret data using redundant cover data such as images, audios, movies, documents etc. This work presents a system to hide a full color image inside another of the same size with minimal quality loss to either image. Deep neural networks are simultaneously trained to create the hiding and revealing processes and are designed to specifically work as a pair. The system is trained on images drawn randomly from the ImageNet database and works well on natural images from a wide variety of sources. Beyond demonstrating the successful application of deep learning to hiding images, it examines how the result is achieved and apply numerous transformations to analyze if image quality in the host and hidden image can be maintained. Two extensions to the basic system are presented that mitigate the possibility of discovering the content of the hidden image. With these extensions, not only can the hidden information be kept secure but the system can be used to hide even more than a single image[1].

References

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Decision: