

## **Abstract**

Steganography is the technique of hiding a secret or sensitive information without seeming to not look like it should be. Secret data hidden by inserted in a particular medium so it does not appear that the media hide the information.

Bit-Plane Complexity Segmentation (BPCS) is one method of steganography, where this method has the capacity of a relatively large insertion of messages. BPCS utilize the characteristics of human vision does not see the visual information in areas that contain noise within an image. BPCS harness the complexity of the calculations on each bit-plane in the slip confidential information.

Final results obtained in this thesis is the BPCS steganography in digital images of BMP is able to accommodate the confidential data of more than 50% of the size of the cover image. The quality of images generated by BPCS steganography method is still good when confidential data inserted up to 50% of the size of the cover image. This can be seen from the PSNR values above 30. However, this method has a weakness against attacks. No one has the BER values below 20% when given the attacks such as compression, noise, resize, and rotation.

**Key Words :** Steganography, Bit-Plane Complexity Segmentation, BMP