

## Ministry of Higher Education and Scientific Research, Iraq University of Babylon information technology collage Information Security Department Morning Study



## IMAGE FORGERY DETECTION Using SVM Algorithm

A Graduate Project Submitted to the Department of Information Security of the College of Information Technology, University of Babylon, in Partial Fulfilment of the Requirements for the Bachelor's degree in Information Security of Information Technology.

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2023-2024

## **Abstract**

In the digital era, image forgery has become a prevalent issue due to the ease of manipulating visual content using advanced editing tools. Detecting such forgeries is crucial for maintaining trust and authenticity in various domains, including law enforcement, journalism, and digital forensics. This paper presents an image forgery detection method based on Support Vector Machine (SVM) classification. The proposed approach involves extracting relevant features from images and training an SVM classifier to distinguish between authentic and forged images. Experimental results demonstrate the effectiveness of the SVM-based approach in accurately detecting various types of image forgeries, including copy-move, splicing, and retouching. Furthermore, the proposed method exhibits robustness against common image processing techniques aimed at evading detection. Overall, this research contributes to developing reliable and efficient tools for combating image forgery in digital media.