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# i-JAMCSIIX 2022

International Jasin Multimedia & Computer Science Invention and Innovation Exhibition

## ABSTRACT BOOK

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**In Partnership:**



Tadulak● University

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# **i-JaMCSIIX** **2022**

International Jasin Multimedia & Computer Science Invention and Innovation Exhibition

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i-JaMCSIIX

Universiti Teknologi MARA Cawangan Melaka Kampus Jasin

77300, Merlimau, Melaka

Web: <https://jamcsiix.wixsite.com/2022>

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# Hiding Information Digitally Under Picture (HIDUP) Using Image Steganography

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JM006 – Innovation – Local – Category C: Students - UiTM Melaka

**Abstract**—Hiding Information Digitally Under Picture (HIDUP) System Using Image Steganography is a project that provides the user with the ability to hide information within an image. HIDUP is different from any current image steganography system available in the market as it implements two different encryption algorithms, which are Libsodium and Bcrypt, to provide more security. HIDUP system can provide photographers or digital artists to embed a new digital watermarking onto their image. This functionality will help them store their signature information into the picture without directly destroying the image quality. This project uses the Waterfall Methodology model because of its simpleness in managing each phase, with distinct deliverables and activities. These phases are Requirement Gathering and Analysis Phase, Design Phase, and Implementation Phase. The Requirement Gathering and Analysis Phase ensures that all information is gathered to gain knowledge from all potential users of the system. It helps to identify the system's features by analyzing all the requirements that have been collected. After that, the Design Phase ensures that the system's overall design, including the databases, is determined before starting the next phase. Finally, the system is being developed in the Implementation Phase. The main strength of the HIDUP system is that it can successfully integrate Image Steganography with two distinct cryptography algorithms. This feature has led to creating a system that can produce a highly secured image that could store messages hiddenly under it. Moreover, user will also be notified by email when dedicated image is being sent to them.

**Keywords**—Image Steganography, Libsodium, Bcrypt