



**Universität
Zürich^{UZH}**

UNIVERSITY OF ZÜRICH

MAT 101 - Programming
Group Project
Fall semester 2016

Submission date: 14.12.2016

Embedding Secret Messages Into Image Files

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1 Description of the project

The goal of our project is to write a program that allows us to embed (secret) messages as invisible data into (PNG) images. In a second step we are able to embed another image by a similar approach.

1.1 Results

As a first step we completed the template. By doing so, we could hide a string into an image. Then we programmed the functions for the embedding of images into other images. At the beginning we did it for images using a colour depth of 1 bit. The hidden image was heavily altered by this process and the result was not good enough for us. Therefore we improved our functions in order to hide an image with more than one bit of depth. The hidden image with our functions is basically unchanged (very similar to the original), because we have access to a higher depth of colour. At the end we have done the necessary improvements: encryption, decryption and encoding. Respectively we have modified the graphic user interface such that the entire project would work.