

Image Encryption Tool

Overview

The Image Encryption Tool is a simple Python program that encrypts and decrypts images using pixel manipulation. The tool allows users to secure their images by adding a key to each pixel's value during encryption and reversing the process during decryption.

Features

- Encrypt any image by modifying its pixel values with a user-provided key.
- Decrypt encrypted images using the same key to restore the original image.
- Simple command-line interface for easy usage.

Requirements

- Python 3.6 or higher
- `Pillow` (Python Imaging Library)
- `numpy`

Usage

1. Run the program:
`image_encryption.py`
2. Follow the on-screen instructions to:
 - Encrypt an image
 - Decrypt an image

Example

To encrypt an image:

- Provide the path to the image (e.g., `input.jpg`)
- Specify the output path for the encrypted image (e.g., `encrypted.png`)
- Enter an encryption key (integer value)

To decrypt an image:

- Provide the path to the encrypted image (e.g., `encrypted.png`)

- Specify the output path for the decrypted image (e.g., `decrypted.jpg`)
- Enter the same encryption key used for encryption

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Acknowledgments

- [Pillow](#) for image handling
- [NumPy](#) for array manipulation