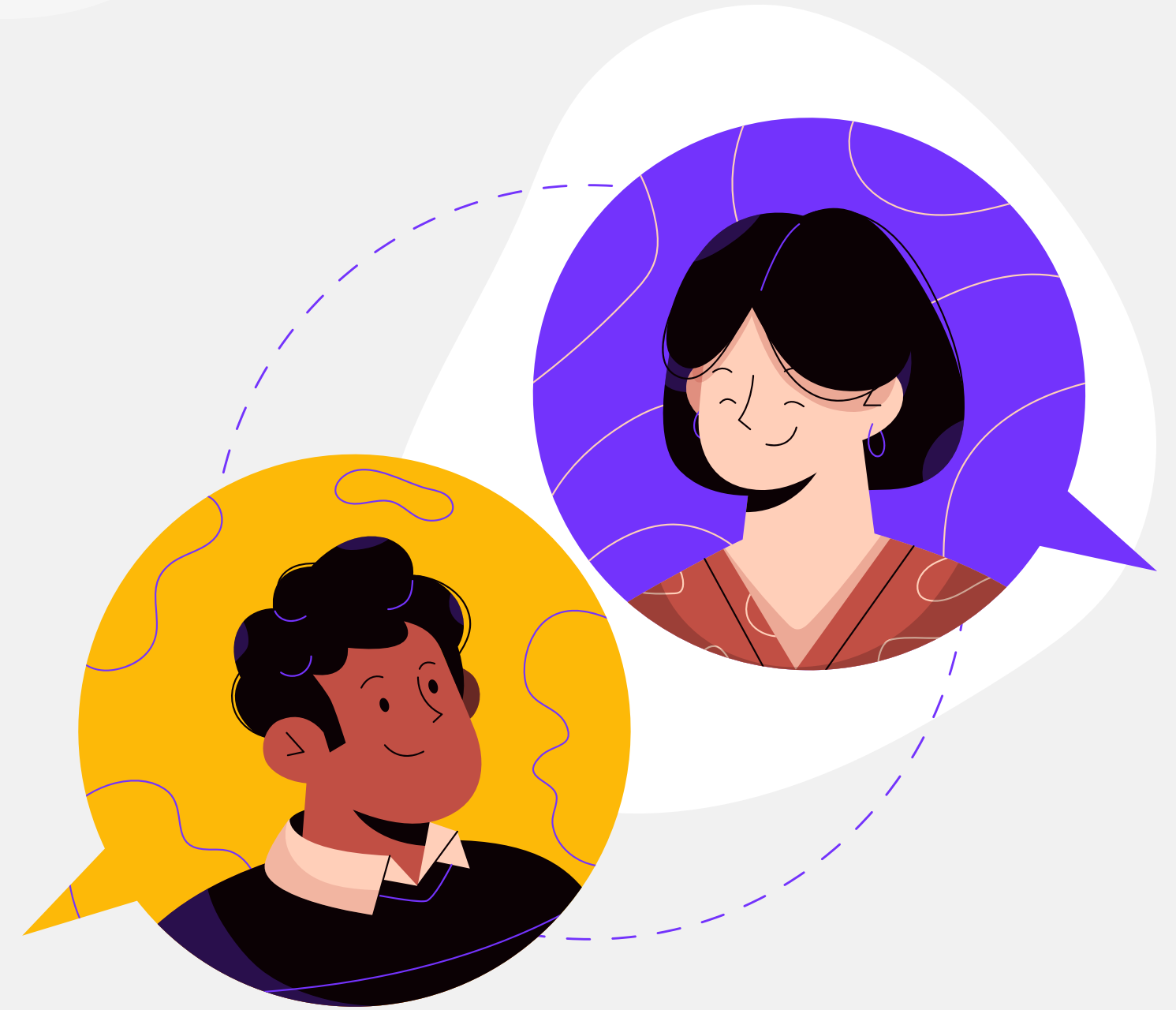# Blockchain-Based Digital Art **Forgery detection system**

Pitch Deck →

bits Crunch

Introduction

Authenticating digital images is increasingly important because collectible digital images must be original to carry value. Because of the widespread availability of photo editing software and tools, it becomes problematic to use the digital images in applications where their genuineness is of prime importance.

Problems with the existing **Marketplace**.
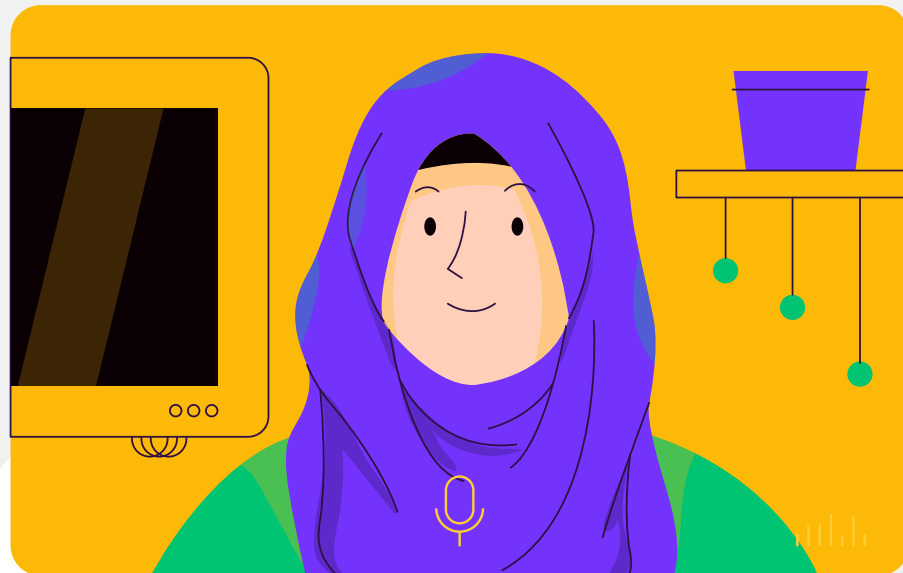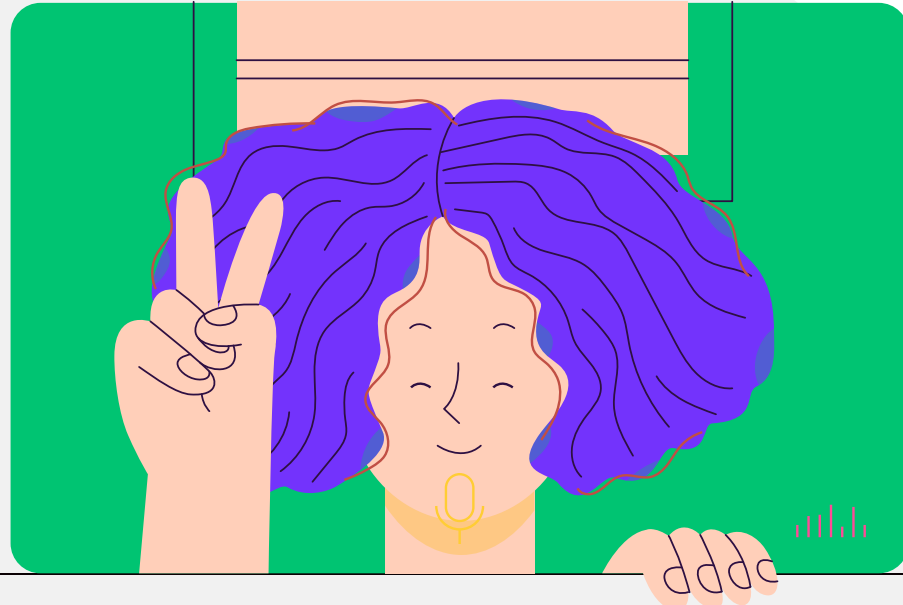
Trust is a primary barrier to adoption for the NFT marketplace ecosystem.

Forgeries and copycats are rampant, and create legal liability for marketplaces.

In order to increase adoption and pave the way for higher level applications of NFT technologies, we must increase the amount of trust commanded by NFT marketplaces.

Verified creator whitelisting or badges are helpful, but not a complete solution for bolstering trust.
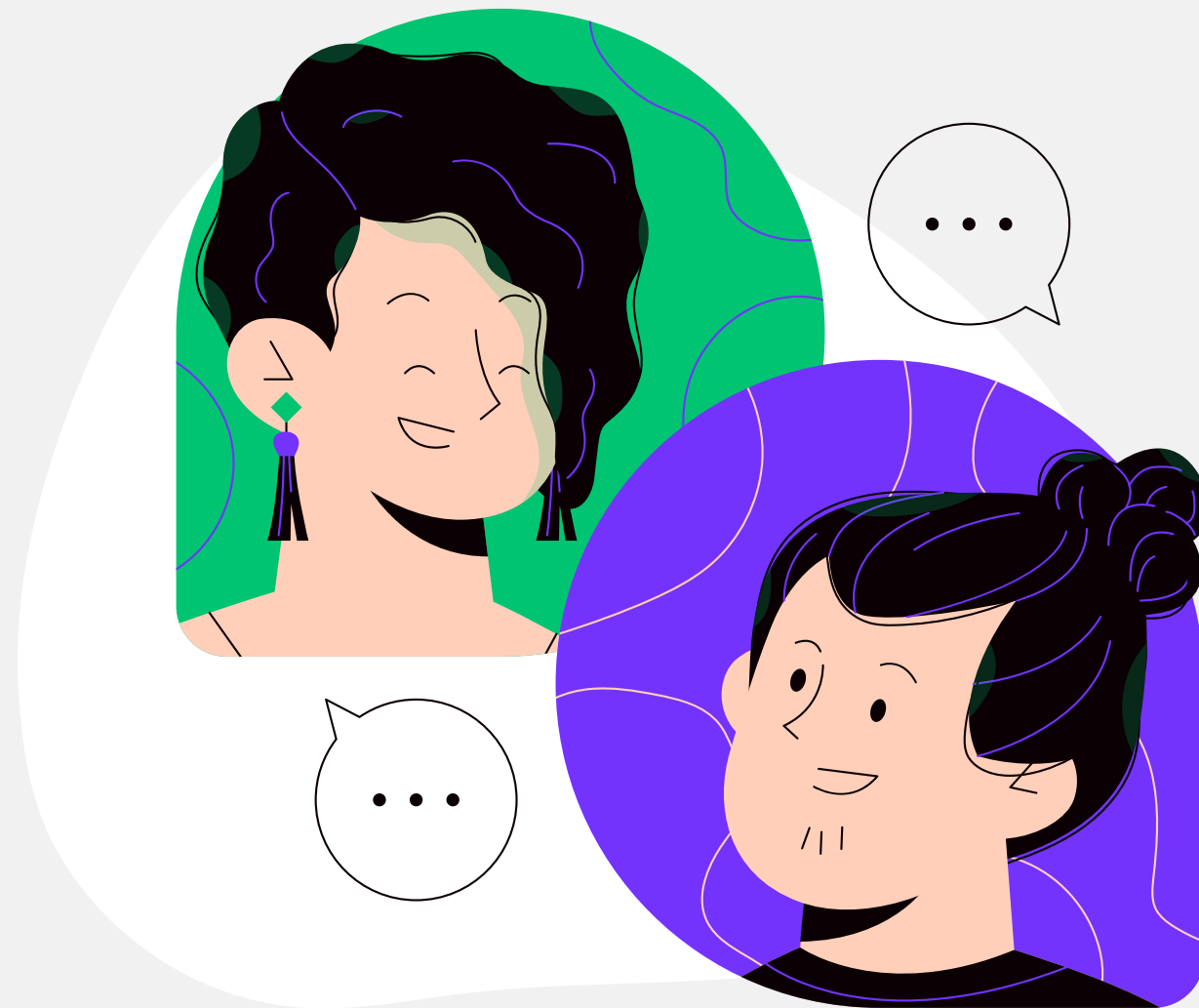
What makes a NFT Marketplace great ?

The key is to build an AI sytstem that generates additional trust by flagging forgeries, copy cats and boot leg content.
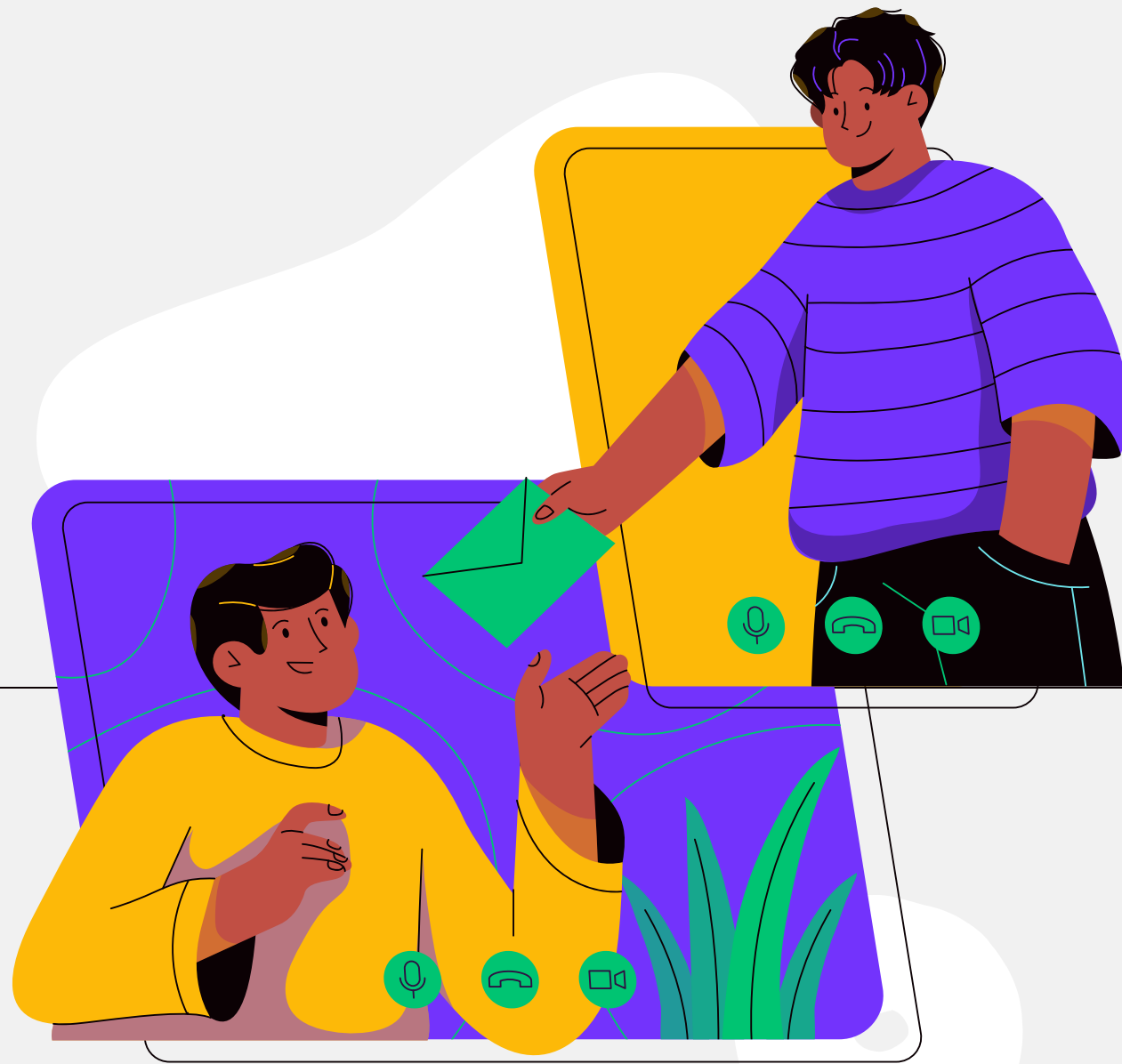
Image Forgery
Detection System

Taking an input dataset of images, computing the hashes, and storing them in a data structure to facilitate fast, efficient search.

Accepting an input query image from the user, computing the hash, and finding all near-identical images in our indexed dataset.
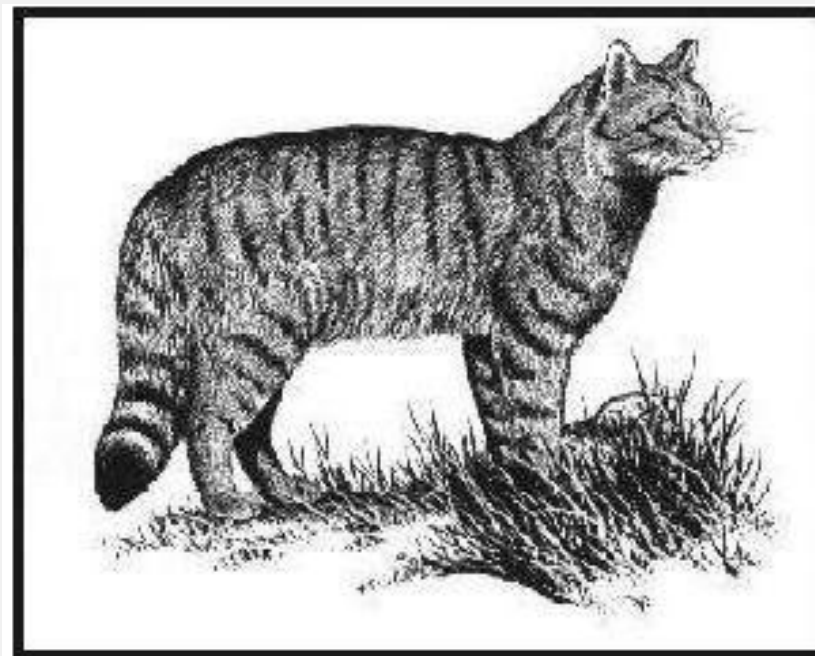
bits
Crunch

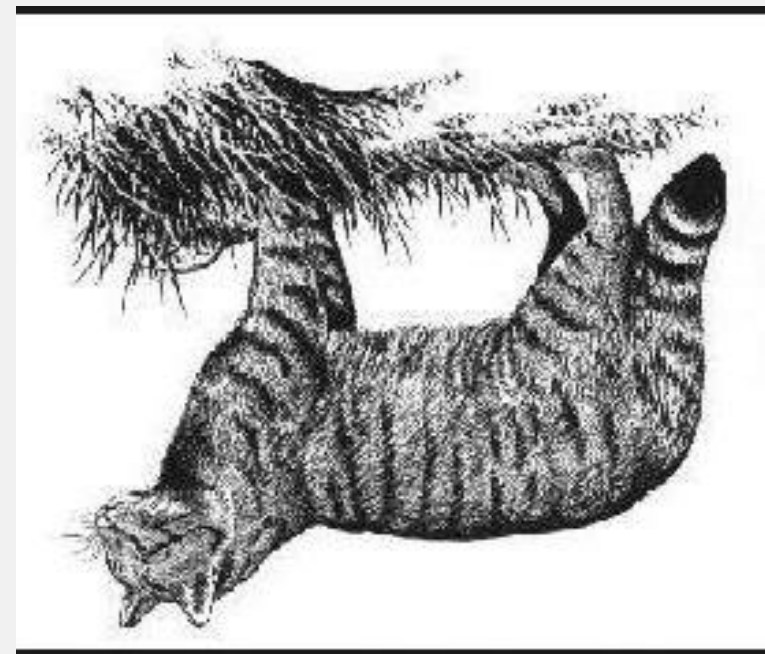# Features of the Image Forgery Detection System ?

The built system is Invariant to :
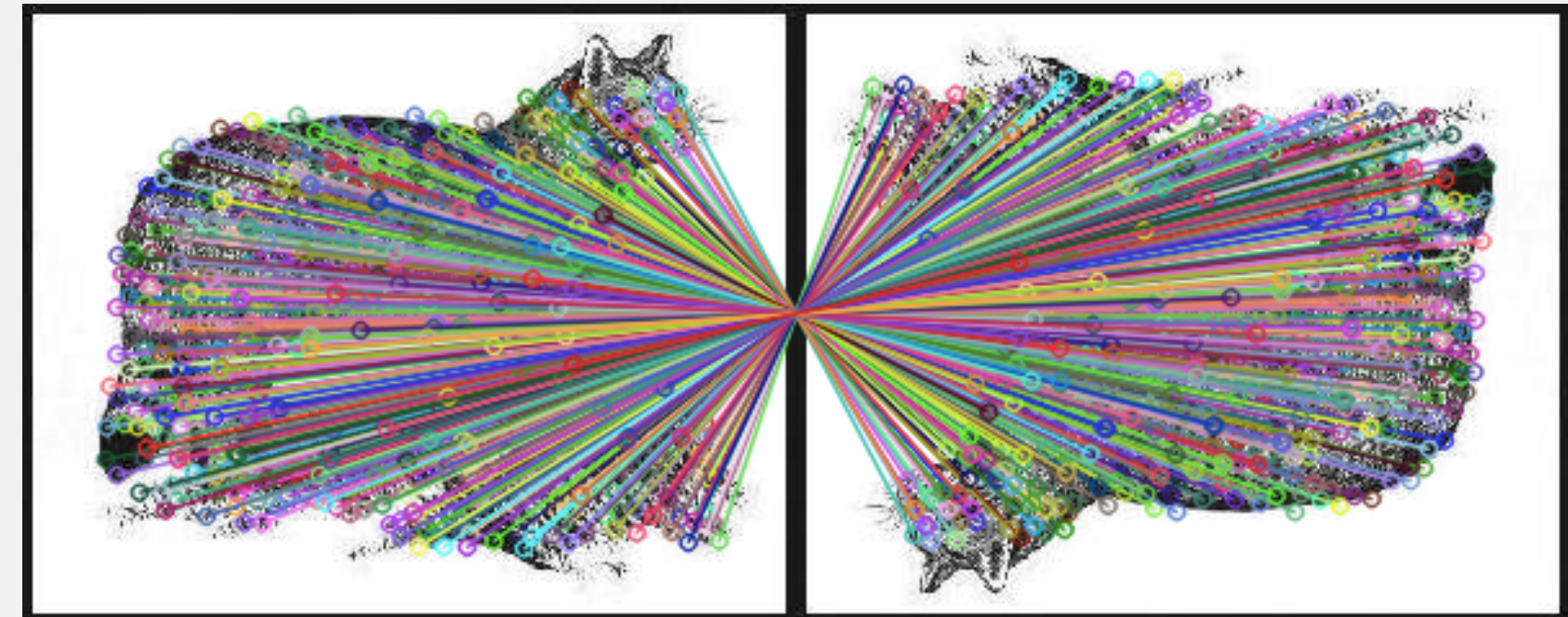
+ Rotation
+ Scaling
+ Copy-Paste
+ Copy-Move

Our System is robust to scaling and rotation
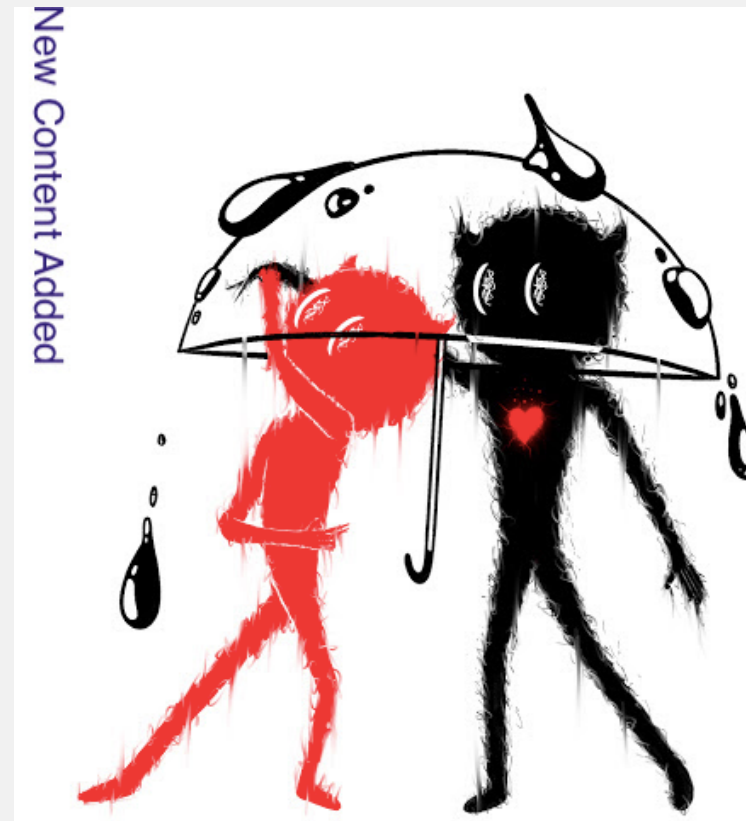

Original Image

Queried Image

Mapping the key points to identify the plagarism

Our system is capable of identifying and locating the key points in the queried image, irrespective of rotation and scaling of the original image.
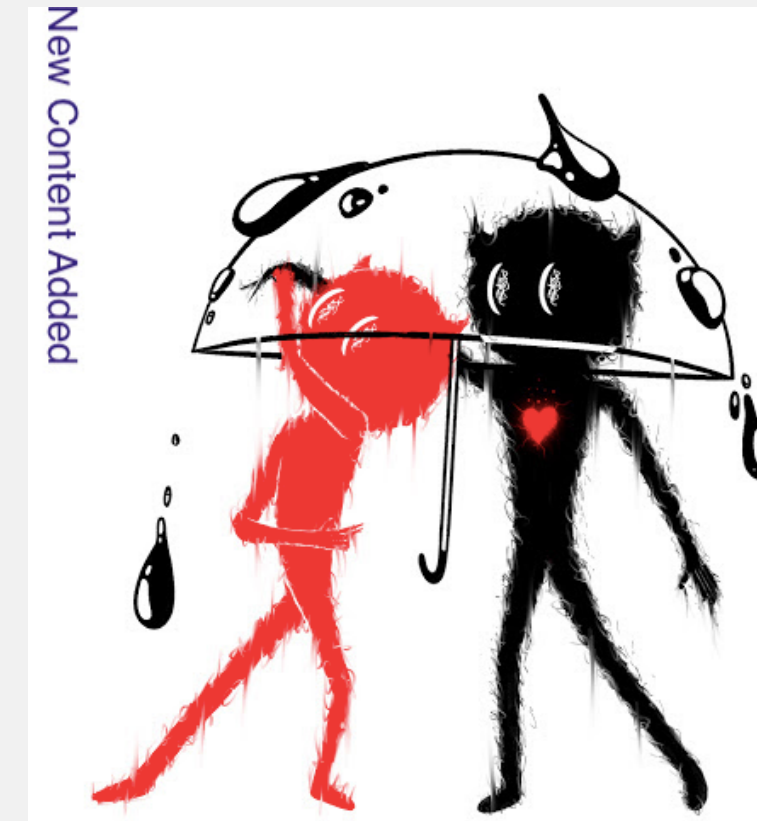
Our System is robust to Brightness, contrast and color changes

Original Image

Queried Image

Matched image from the database for the queried image

Our system is capable of identifying the duplicates and near-duplicates that have been modified with brightness and contrast color changes.

Thank You