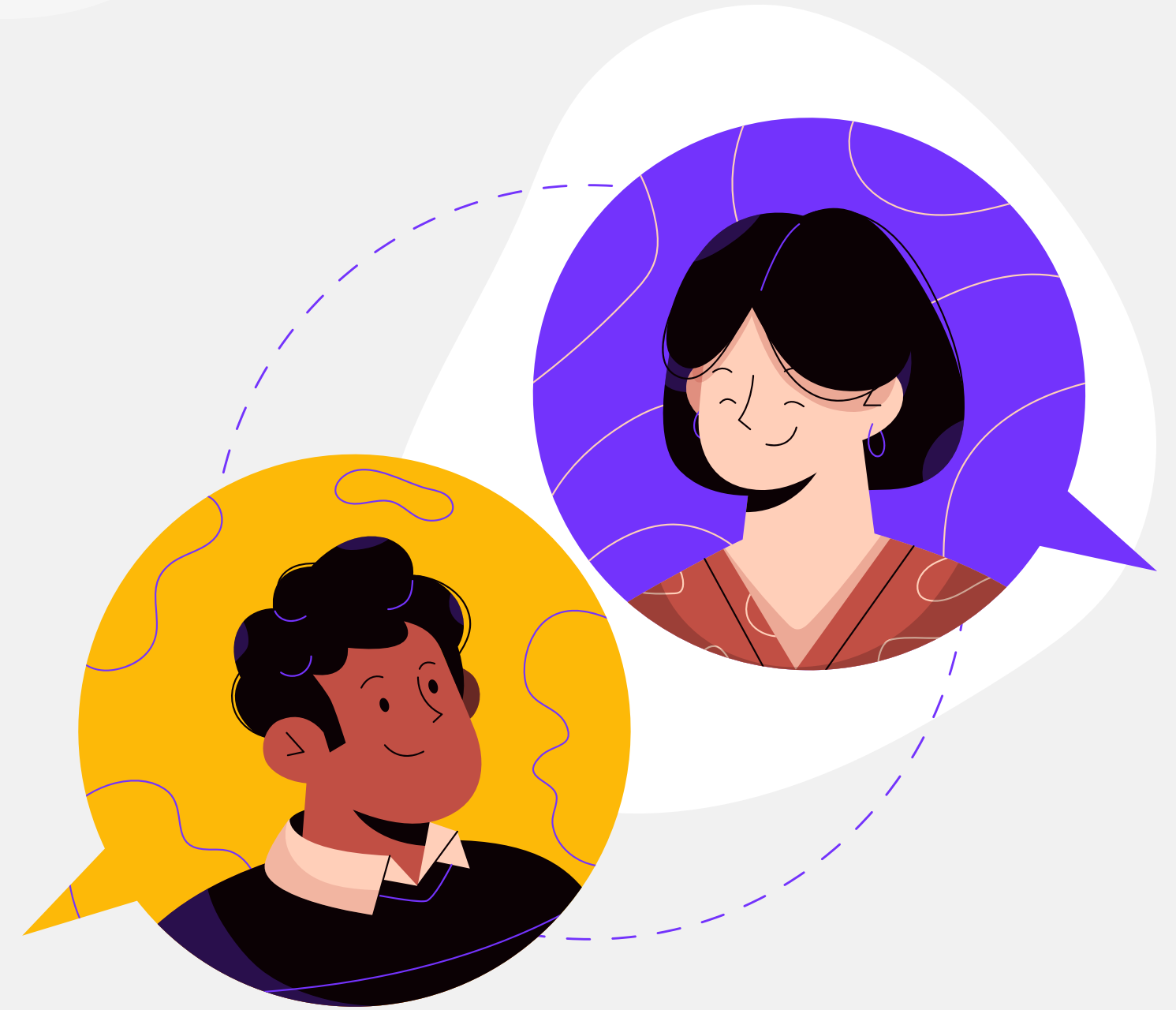


# Blockchain- Based Digital Art **Forgery** detection system

Pitch Deck

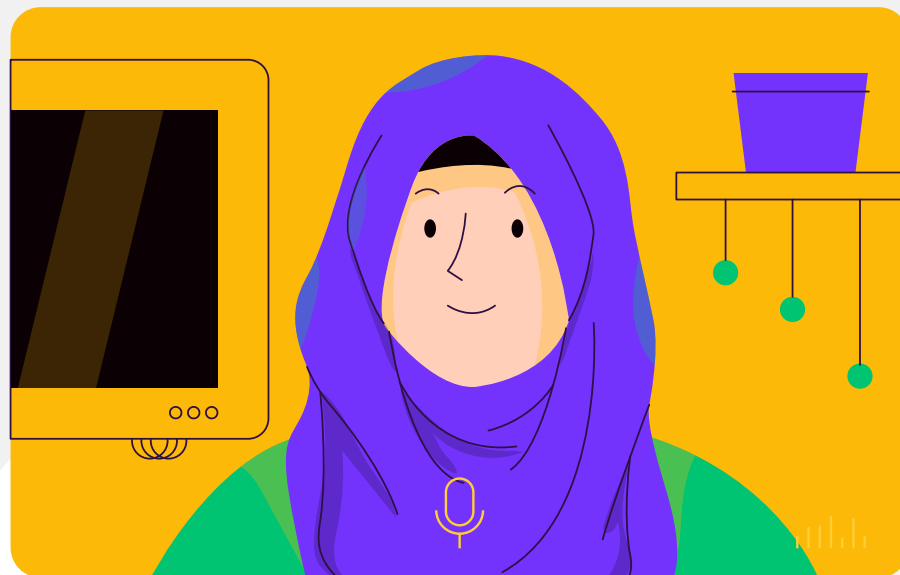


# Introduction

Authenticating digital images is increasingly becoming important because digital images carry important information. 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.



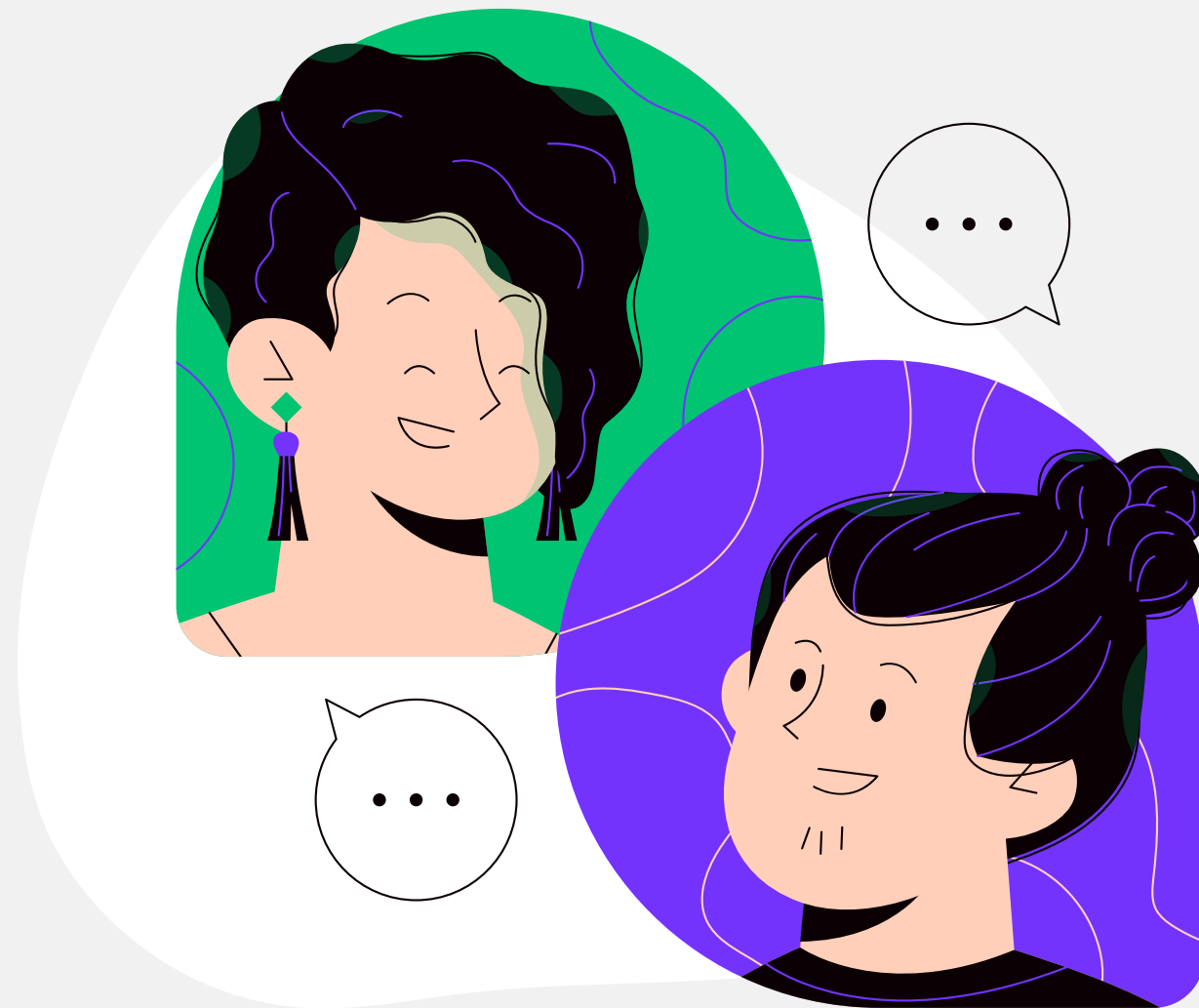
# What makes a NFT Marketplace great ?

The key is to build an AI system that generates additional trust by flagging forgeries, copy cats and boot leg content.



# Image Forgery Detection System

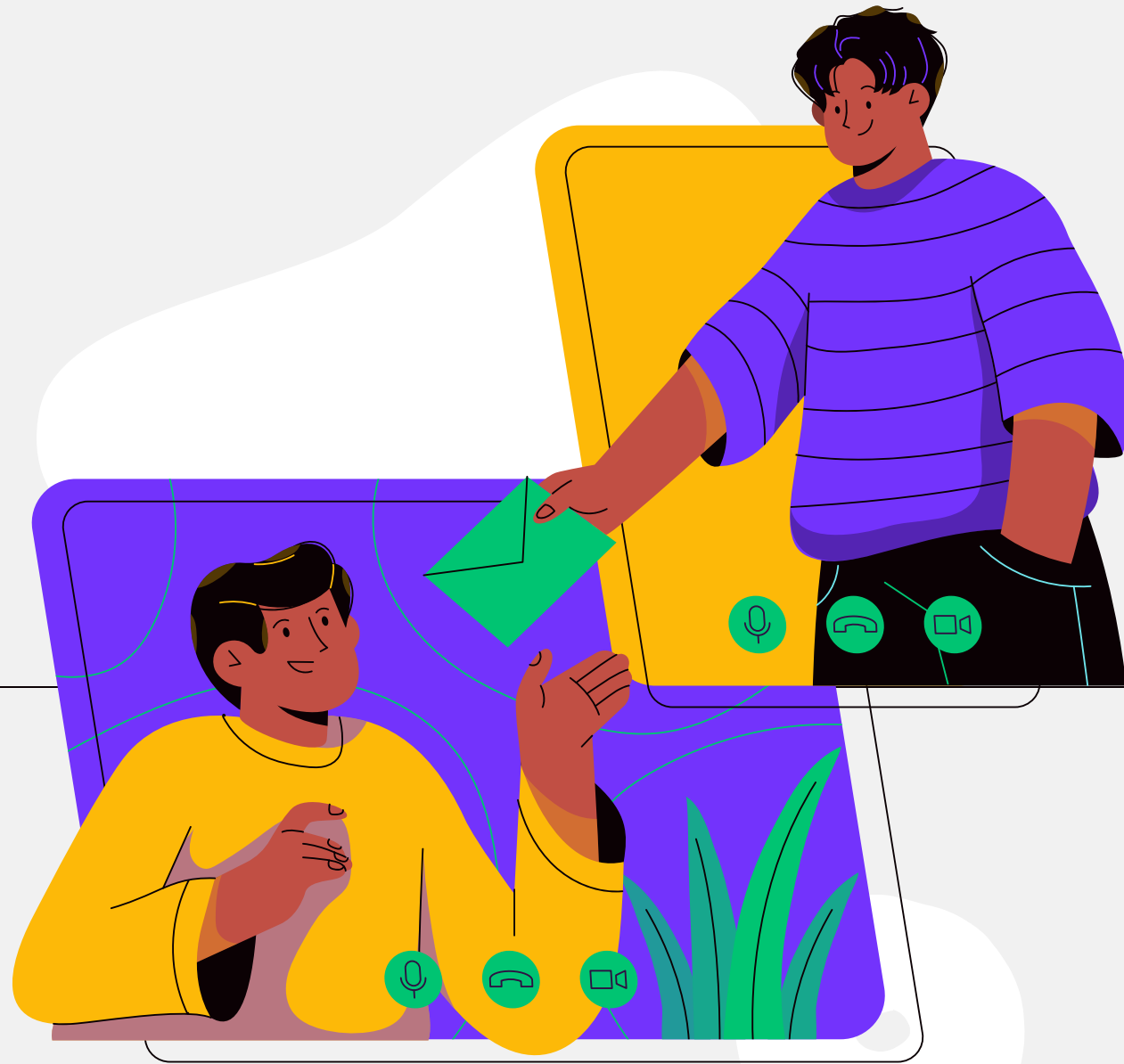
Taking an input dataset of images, computing the hashes, and storing them in a data structure to facilitate fast, efficient search.



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



# Features of the Image Forgery Detection System ?



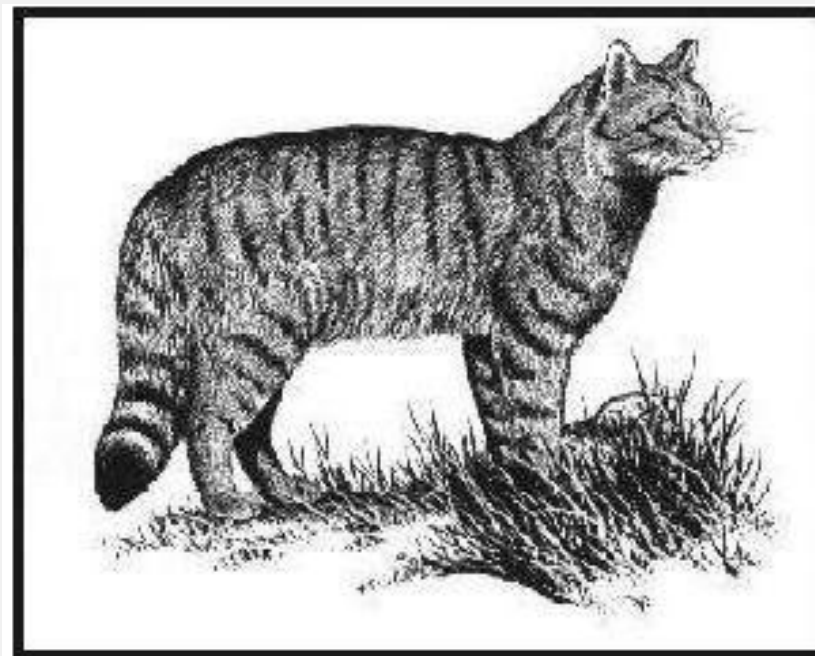
The built system is Invariant to :

- + Rotation
- + Scaling
- + Copy-Paste
- + Copy-Move

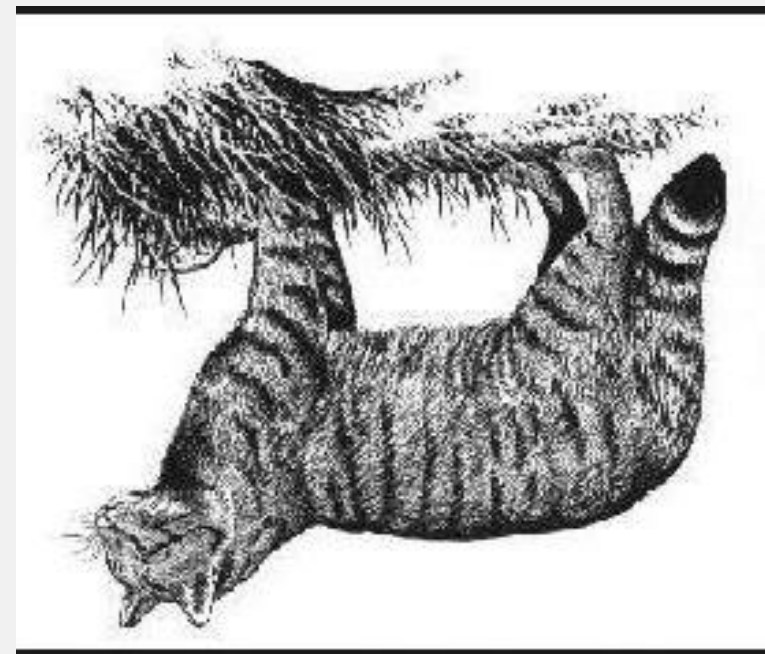




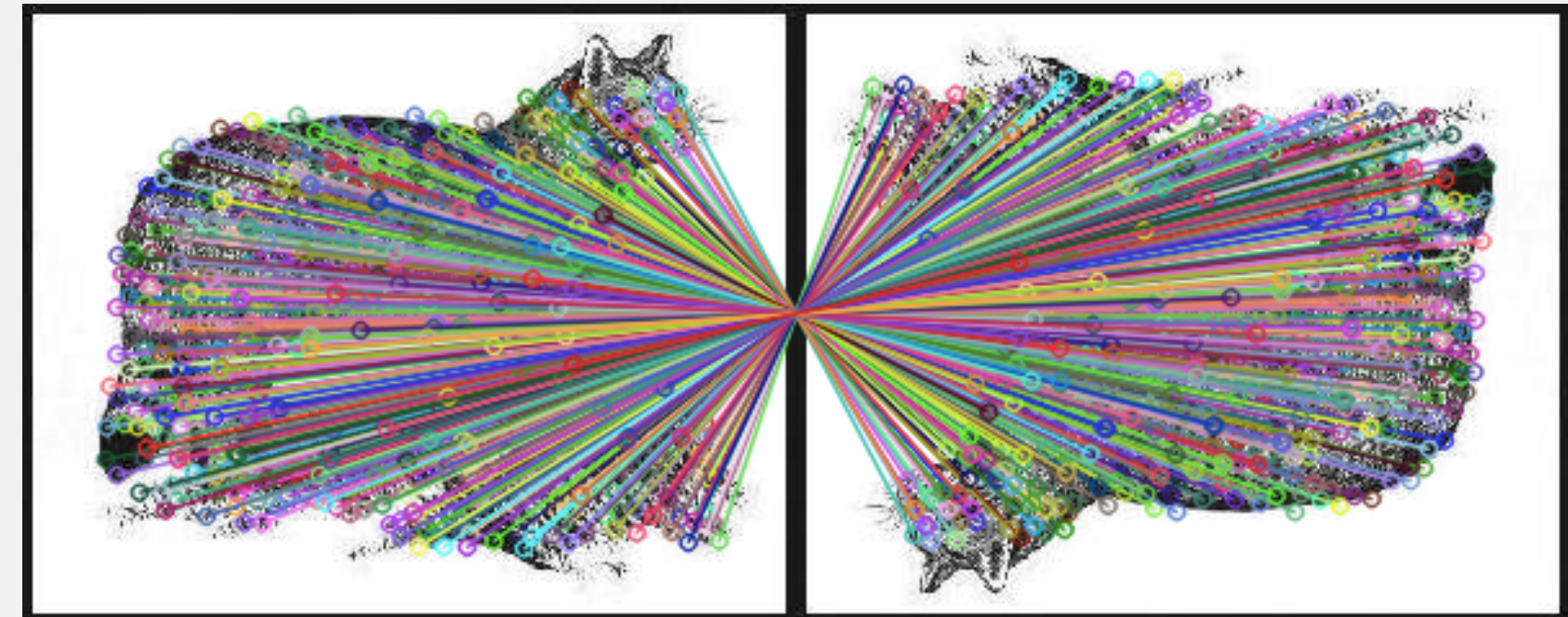
# Our System is robust to **scaling** **and rotation**



Original Image



Queried Image

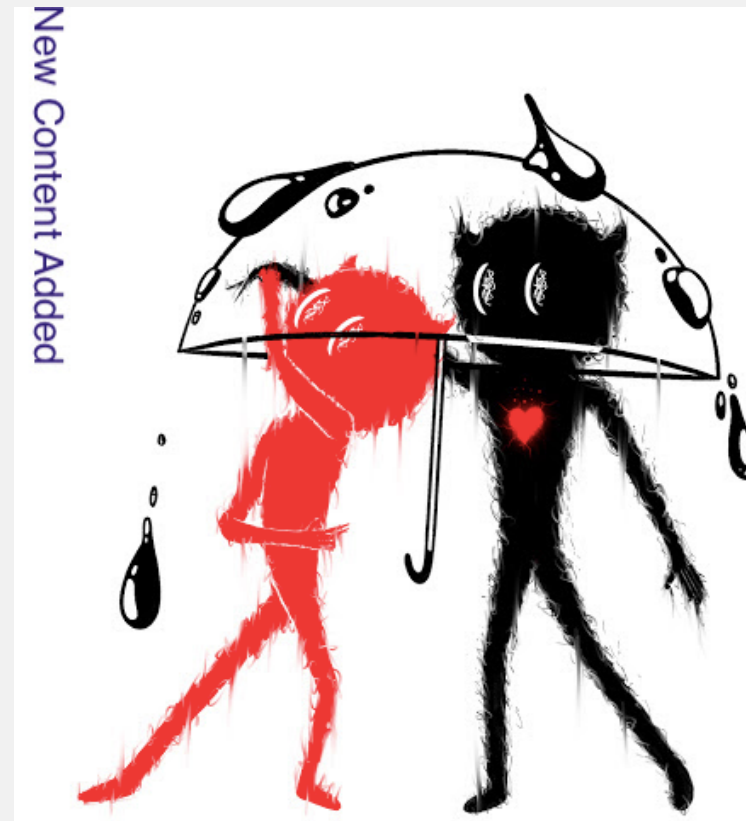


Mapping the key points to identify the plagiarism

Our system is capable of identifying and locating the key points in the queried image, irrespective of rotation and scaling of the original image.



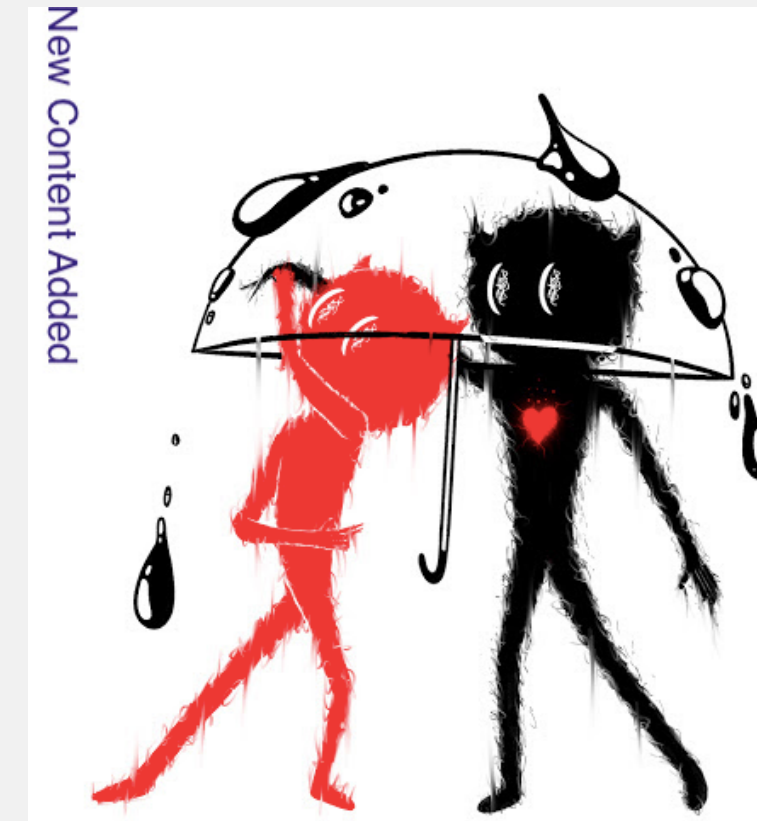
# Our System is robust to Brightness, contrast and color changes



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.





A large, white, equilateral triangle is positioned in the center of the slide, pointing downwards. The text 'Thank You' is centered within this triangle.

Thank You

