

INVID – WE VERIFY Documentation Cyber Intel | Invid | 22/09/2023

Executive Summary

InVID is a photo & video verification tool developed by the InVID-WeVerify project, a European Union-funded project that aims to develop tools and methods to combat disinformation. InVID is a free and open-source tool that can be used to verify the authenticity of videos and images, and to identify and debunk fake news.

Index

Executive Summary			 	 	1
Ind	ex			 	1
		on			
		ils			
		n			
5.	Scope and	d Limitations	 	 	6
		on			
		?s			

1. Introduction

InVID has been designed as a verification "Swiss army knife" helping journalists, fact-checkers, and human rights defenders to save time and be more efficient in their fact-checking and debunking tasks on social networks especially when verifying videos and images.



2. Tool Details

Reverse image search: InVID can be used to search the web for other instances of an image or video, which can be helpful for identifying the original source of a video or image, and for detecting manipulated or edited content.

Key frame analysis: InVID can be used to extract key frames from a video and then search the web for those key frames. This can be helpful for identifying the location where a video was filmed, or for identifying objects or people in a video.

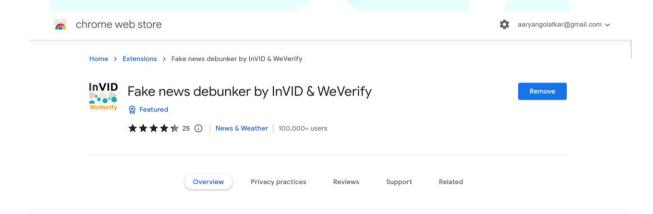
Metadata analysis: InVID can be used to analyze the metadata of a video, such as the creation date and location, the camera model, and the GPS coordinates. This information can be used to identify fake videos that have been created using stock footage or that have been manipulated to change the location or time of the video.

Social media analysis: InVID can be used to analyze the spread of a video on social media, including the accounts that have shared the video, the comments that have been made on the video, and the engagement that the video has received. This information can be helpful for identifying videos that are being shared as part of a disinformation campaign.

3.Installation

InVID is available in the form of a browser extension.

Link: InVID Plugin

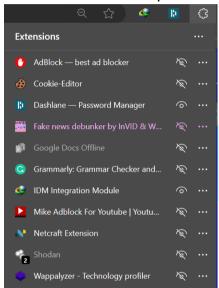


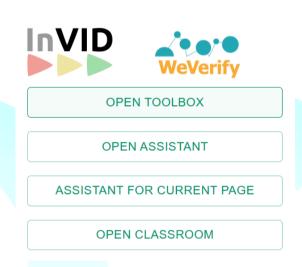


4. Execution

To run the tool

- Open the Extensions tab
- Select the InVID extension
- Then select "Open Toolbox"





Use Case 1. Reverse Image Search

- We can find the source of the presented image
- We can use Google Lens, Yandex & Baidu for reverse searches

Sample image





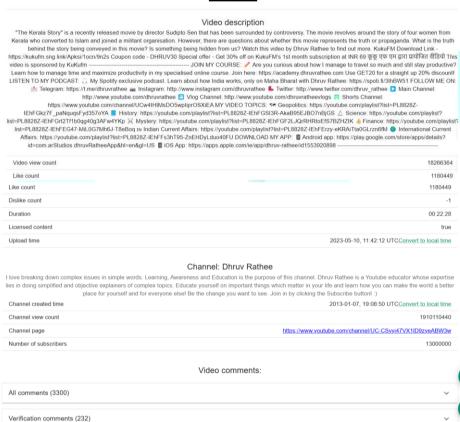
Use Case 2. Video Analysis

- Provides all the metadata & information about the video
- Also provides information about the channel on which the video was uploaded

Sample Output of a YouTube video

The Kerala Story | True or Fake? | Dhruv Rathee 2023-05-10, 11:42:12 UTC





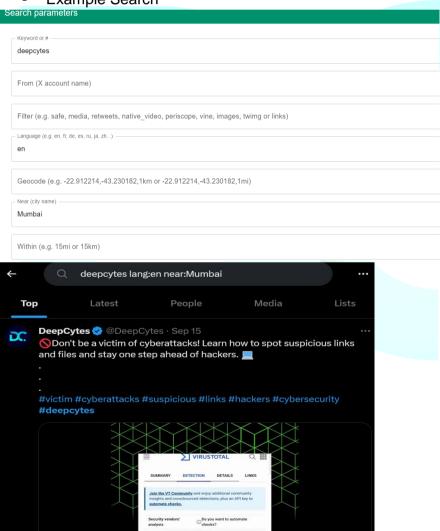
Use Case 3: Perform Forensics on an Image to detect anomalies

- Provides an enhanced toolkit to detect image forgeries.
- Requires an account as the features are only available to journalists, fact checkers, researchers, etc.



Use Case 4: Perform advanced search queries on X (Formerly Twitter)

- It performs advanced search queries on X (ex-Twitter) including by time interval up to the minute.
- Search parameters include
 - Keyword
 - Source account name
 - o Filters (retweets, links)
 - o Language
 - o Geolocation
 - Near city name
 - Range (km or miles)
- Example Search





5. Scope and Limitations

Language support: InVID currently only supports English, but support for other languages is planned.

Video format support: InVID does not support all video formats.

Accuracy: InVID is not perfect, and there are some cases where it may not be able to accurately identify fake videos.

6. Conclusion

Overall, InVID is a powerful and versatile tool for image & video verification. It is accurate, easy to use, transparent, and free. InVID is a valuable tool for journalists, fact-checkers, social media monitors, educators, and anyone else who wants to verify the authenticity of videos and images.

7. References

The InVID Verification Application, an integrated tool for video verification (invid-project.eu) "Verifying Videos with InVID" (2019) by the Verification Handbook, a project of the Poynter Institute.