

Add a new dimension to brand monitoring & protection with LTU engine

Most corporations invest huge sums to build brand equity and then track and protect visual brand assets such as logos and designs.

In today's online world this can be a daunting task often leaving corporations with less control of their brands.

Image recognition technology helps put the control back into the hands of the corporations.

Complementing textual and manual detection of brand assets, image recognition automatically identifies where and how logos, product imagery and even color schemes are used.

Complement textual & manual detection of visual content with image recognition



Internal visual brand audit

Ensure that all divisions, franchisees, resellers and other authorized stakeholders are using 'approved' brand assets and color schemes.

Online brand protection

Detect unauthorized and fraudulent use of visual brand assets such as product photography and logos used online.

Counterfeit products & packaging

Detect unauthorized use of product packaging or specific graphical design elements (i.e. graphic t-shirts) online, in stores or even at assembly lines.

Monitor brand engagement & reputation

Track product images, logos and brand images posted by consumers online.

Automate identification and tracking of visual brand assets for increased efficiency

LTU engine is a comprehensive and robust image recognition platform that is used to automate the search and identification of image and photos based on pixel content alone.

LTU engine seamlessly integrates with other technology solutions and platforms and presents a powerful addition to traditional textual and manual processes.

Speed up process, increase quality & reduce human error with automatic identification and tracking of visual content using image recognition.

- ▶ **Process more data, faster**
- ▶ **Increase operational efficiency**
- ▶ **Identify visual content irrespective of keywords or tags**
- ▶ **Reduce human error**

Automatically detect unauthorized and fraudulent use of visual brand assets.

Comprehensive, robust and scalable image recognition platform

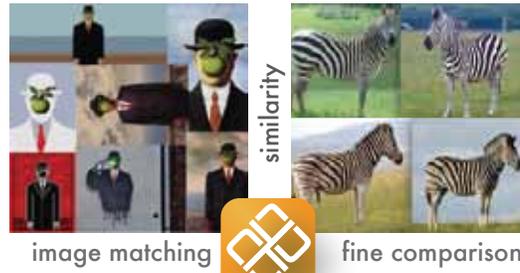
LTU engine is a comprehensive software platform that combines advanced image recognition algorithms for seamless integration with even the most sophisticated software environments.

LTU engine is used to analyze and find same images, similar images, differences between images and extract and search by colors based on the analysis of pixel content alone.

- ▶ On premise software (license) or on demand (SaaS)
- ▶ SOAP/XML & REST/JSON available for integration
- ▶ Multiple SDKs - java, PHP, python, perl, C++, C#
- ▶ Index & search millions of images

Image matching

Detect same or edited images. Robust against image manipulations, cropping, etc. Capable of matching entire image or parts of image i.e., logo on full page.

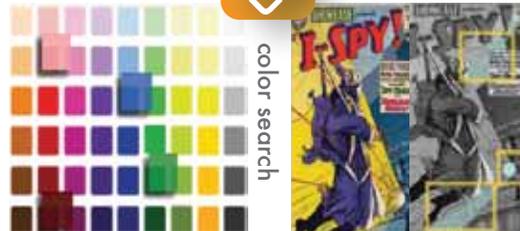


Similarity search

Identify images with visually similar characteristics based on shapes and colors. Can be used to avoid creating assets that are very similar to what already exists.

Color search

Extract colors from single image or collection of images. Define colors to use for search in database of images based on the actual color not tags.



Fine image comparison

Automatically find the subtlest differences between matching images that can be challenging for human eye to quickly detect.

ABOUT LTU TECHNOLOGIES

Founded in 1999, LTU technologies is a pioneer of image recognition technologies. LTU engine has successfully been integrated into commercial and government solutions worldwide for ad tracking, brand protection, copyright protection, mobile applications, eCommerce search and government and law enforcement.

LTU technologies has offices in Paris and New York.

VISUAL CONTENT PARTNERS

