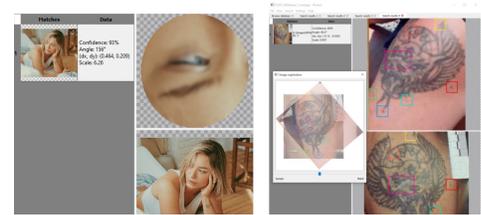


## Executive Summary

Our proprietary technology DejaViewAI® is useful as a stand-alone technology or used in an enterprise environment (Cloud/VM) for image comparison & search. Using our scripting API, we can be paired with other databases and analytics to achieve drastic efficiency and accuracy for image recognition. This new algorithm is much faster than traditional methods for finding identical and similar images based on feature recognition (SIFT, etc.) and Artificial Intelligence/Machine Learning (AI/ML).

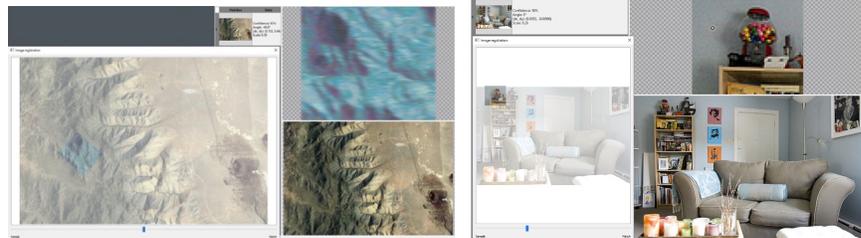


By utilization of this algorithm, time, energy and cost required for image likeness or recognition for still or video images could be drastically reduced. It can be used for:

- Whole or Partial Image
- Foreground, Midground, Background or Overlay
- Low Resolution to Extremely High Resolution (like logos, words, etc.)
- Single or Multiple Objects
- AR/XR/VR Content Support (including Lightstream)
- Common and Professional/Scientific image formats (HDRI)
- EXIF and MetaData Support
- Spherical, volumetric, 360° and 3D (with built-in dewarping for wall, panoramic, 1/2 sphere & full sphere)

The algorithm is the underlying engine for an image search tool with a rough UI that allows image-based searching. The search is able to identify likeness and look past images that have been altered by:

- Recoloring (including images taken with different sensors, like IR, thermal and scientific scanners, like terahertz)
- Arbitrary rotation
- Blur
- Skew / Shear
- Crop (including irregular shapes)
- Partially Obscured
- Scale
- Flip / Mirror
- Noise (natural or artificial, including adversarial noise)
- Compression artifacts

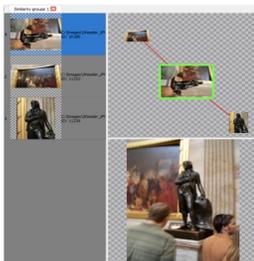


Search results currently provide:

- Visual comparison with automatic alignment and partial transparency
- Confidence score (%)
- Image registration (rotation angle, translation, shift, scale, mirror)
- Multiple matches
- Similarity Groups – Shows how groups of images are related to each other, with multiple levels of association.

### DejaViewAI® Engine technical information:

1. Purely algorithmic searching that is 100% reliable, run on CPU, RAM and cache – GPU not needed.
2. One-to-many (1:N), many-to-one (N:1) and even external batch searches (M:N).
3. Arbitrary rotation and arbitrary skewing/scaling. Even recoloring images does not affect the results.
4. It is highly scalable, from a single microPC to very large clusters/virtualized environments to support searching in databases containing billions and even trillions of images.
5. Full scripting API functions are available, that allow automation and integration with other systems.



### Summary:

There are no other search engines on the market like DejaVuAI®. The closest comparable technology cannot support mirroring, and fewer support 90° rotation increments. Suited for a wide variety of markets including supporting the US Government and allies, the DejaVuAI® technology is a valuable tool in the hands of US DoD, Intelligence, and Law Enforcement. We can identify image sources, and quickly tell if it was altered, faked, or spoofed (fake news detection). We can help make smart manufacturing more efficient by assisting with inspection, calibration, fault diagnosis, digital twin, and model-based systems engineering (MBSE). We can be integrated with autonomous UAVs with accurate and efficient recognition (IFF, products, objects, and locations) – even off-planet or in locations where GPS and other sensor data is unavailable or jammed.



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