

seeing what matters



Deep Learning-based industrial image analysis

Automated detection, inspection and classification

Human-like
Self-learning
Powerful



ViDi offers the first ready-to-use Deep Learning-based software dedicated to industrial image analysis. ViDi Suite is a field-tested, optimized and reliable software solution based on a state-of-the-art set of algorithms in Machine Learning. It allows tackling otherwise impossible to program inspection & classification challenges. This results in a powerful, flexible and straightforward solution for countless challenging machine vision applications. The Suite consists of 3 different tools:



Feature localization & identification

ViDi blue is used to find and localize single or multiple features within an image. Be it strongly deformed characters on very noisy backgrounds (OCR) or complex objects in bulk; the blue tool can localize and identify complex features and objects by learning from annotated images. To train the blue tool, all you need to provide are images where the targeted features are marked.



Segmentation & defect detection

ViDi red is used to detect anomalies and aesthetic defects. Be it scratches on a decorated surface, incomplete or improper assemblies or even weaving problems in textiles; the red tool can identify all of these and many more problems simply by learning the normal appearance of an object including its significant but tolerable variations. ViDi red is also used to segment specific regions such as defects or other areas of interest. Be it a specific foreign material on a medical fabric or the cutting zone on lace; the red tool can identify all of these regions of interest simply by learning the varying appearance of the targeted zone.



Object & scene classification

ViDi green is used to classify an object or a complete scene. Be it the identification of products based on their packaging, the classification of welding seams or the separation of acceptable or unacceptable defects; the green tool learns to separate different classes based on a collection of labelled images. To train the green tool, all you need to provide are images assigned to and labelled in accordance with the different classes.

Graphical & application programming interfaces

HTML based graphical user interface (GUI) - Required browser: Mozilla Firefox
C runtime library (Windows DLL / Linux shared library)
Microsoft .Net library

Hardware & OS Requirements

CPU: Intel Core i5 (minimum), Intel Core i7/Xeon (recommended)
Optional GPU: NVidia Graphic Card (CUDA compute capability ≥ 3.0)
Recommended: GeForce GTX970-980, GTX TITAN, Quadro K2200-M4000-M6000, Tesla K40-K80
Memory: 4GB (minimum), 8GB (recommended)
1 USB port (for the license dongle)
OS: Windows 7 – 64 / Linux - Ubuntu 14.04.64 bits LTS

Support & Maintenance

All licenses are permanent and do not require maintenance or renewable fees
ViDi Suite comes with a free 12 months update & remote application engineering support

Miscellaneous

ViDi Suite GUI & documentation language: EN
Note: ViDi Suite performance - in term of processing time - will depend upon hardware selection