SNVision Studio

Pattern recognition engine

SOFTWARE SOLUTIONS

OUR CORE TECHNOLOGY

Advantages

- **Ultra-rapid simultaneous detection of multiple patterns.**
- **Recognition of partially occluded objects.**
- **Robust to rotation, size or resolution changes.**
- **Quasi-invariance to image quality and lighting conditions.**
- **Processes images and videos.**
- **A very light imaging software kernel with extremely small footprint.**
- **Works on COTS equipment, no high end, no dedicated or proprietary hardware needed.**
- **Wide range of scalability from standalone PC to multicore cluster via low end chipset.**

SPIKENET TECHNOLOGY

UNLOCK YOUR VISION

SNVision Studio, the software solution for real-time pattern recognition, can be integrated in your applications.

Use case (non-exhaustive):

- *Sport sponsorship efficiency measurement in broadcast events by evaluation of brand exposure via logos detection.*
- *Broadcast advertisements monitoring by automatic image identification.*
- *Vehicle counting and classification, traffic estimation.*
- *Product detection and identification (number of facings, SKU) at point of sale.*
- *Customers statistics at sales point with people counting.*
- *On the fly face detection, extraction and identification.*

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SNVision Studio

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SOFTWARE SOLUTIONS

SNVision Studio to provide artificial vision to your applications.
SNVision Studio comprises:

• **SNVision ModelBuilder** is used to create a representation (or model) of your target.
The ModelBuilder application estimates the robustness of the recognition on a series of images in order to define the best-fitting model.
Localization, size and quality of the target detection is automatically provided for each hit.

Best models can be backed up for later use within the SNVision Library (.dll, Dynamic Link Library).

• **SNVision Library** is the name of our main technological component, used to detect, within a batch of images, all the targets corresponding to a loaded model, in an ultra-rapid way.

Recognition is achieved whatever the angle, scale or resolution of the image; and at the same time displays a great tolerance to lighting conditions.

NOTEWORTHY INTEGRATION ACHIEVEMENTS :

Repucom International, the global leader in brand and sponsor analysis. Their system for sport sponsorship efficiency measurement in broadcasted events features a logo detection system by Spikenet.

The NAVIG Project, to provide visually-impaired people with an artificial vision solution helping them to reach a given destination, in a reliable and safer way.

Novergie Sita Suez Environment: possesses a detection system for people's presence on the waste disposal conveyor belt. Detection combines many form detections, amongst which face detection and specific patterns recognition.

Australian Paper, the number 1 paper production company in Australia: watermark recognition in secured papers using SNVision.

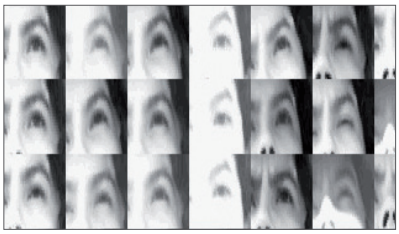
Health Robotics, the global leading supplier of life-critical intra-venous medication preparation, compounding, and dispensing robots : vial and syringes recognition by Spikenet.

Rooted in Visual Neurosciences research, and after two decades in R&D, Spikenet's technology has grown to a unique and unparalleled level in ultra-rapid form recognition.

Recognizing a form in a few milliseconds, or retrieving an image among 100 million in just a second, the remarkable performances of its image analysis engine, as well as its wide specter of applications, are what make Spikenet the ideal solution to any vision-related problem.

Spikenet Technology develops a revolutionary real-time pattern recognition system based on asynchronous spiking networks.

Spikenet Technology products can be declined as softwares or as embedded systems.



Main Features

Performances:

Processing speed depends on 3 main factors:
• Minimal size of the target to be found
• Number of models
• Input image size
On a regular desktop, 1 ms model for 1 million pixels.

Additional technical information:

• Development environment: MS Visual Studio 6, 2003, 2005, 2008, 2010
• 1 GHz microprocessor minimum
• MS Windows XP-, Vista- and 7-compatible
• Compatible with most Video Capture systems
• Compatible with a wide range of USB camera, ieee1394, IP

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