SDK
Bundle of all Open eVision libraries and Studio

At a Glance
- Cost effective bundle of all eVision's libraries, plus Open eVision Studio
- Includes EasyImage, EasyGauge, EasyFind, EasyMatch, EasyObject, EasyColor, EasyOCR, EasyOCV, EasyBarCode, EasyMatrixCode, EasyQRCode and Open eVision Studio

Benefits

Open eVision Studio: Evaluation, prototyping and development tool
Open eVision Studio is the evaluation, prototyping and development tool of Open eVision. Its intuitive graphical user interface allows you to call and immediately see the result of any of eVision's 2D image processing functions. A scripting functionality generates the corresponding code, which can then be copied and pasted into your application. Open eVision Studio is free (when using Open eVision 2.0 and above) and does not require any license. Just click on DOWNLOAD OPEN EVISION STUDIO and install Open eVision. Sample images, manuals and sample programs are included.

EasyImage Description
- EasyImage includes operations usually performed as pre-processing steps to improve the image quality and obtain a good contrast between the background and the objects to be inspected.
- EasyImage supports gray-level and color images. Selected morphology functions are also optimized for binary (1-bit per pixel) and bi-level images.
- EasyImage includes numerous image processing functions, such as enhancement and restoration by linear or non-linear filtering, arithmetic and logic operations, geometric transformations for image registration, histogram analysis for thresholding, projection, ...

EasyGauge Description
EasyGauge is a cutting-edge measurement and dimension control library for use in gauging and metrology applications. By relying on proven sub-pixel edge detection (Point & Line) and shape fitting (Rectangle, Circle, Wedge & Polygon) algorithms, it allows determining the dimension, position, curvature, size, angle or diameter of manufactured parts with an excellent accuracy. Robustness is ensured by powerful edge-point selection mechanisms that are intuitive and easy to tune, allowing measurement in cluttered images. In addition, EasyGauge also supports the automatic measurement of parallel sides, thus providing means of measuring the thickness of flat or bent objects, as well as the precise location of corners.

EasyObject Description
The EasyObject library handles image segmentation, i.e. the decomposition of images into separate objects, also called blobs.
Once the objects have been constructed, they can be handled as independent entities. Various geometric parameters or features, such as area, width, or ellipse of inertia, can be computed for each object. Objects of interest can be selected by means of their position or of their computed features. EasyObject also supports the inspection of holes in defined objects. Holes are managed as the objects themselves, benefiting from the same geometrical features. EasyObject manages the relationship between objects and holes, defining parent objects for holes.

**EasyColor Description**

EasyColor includes a set of optimized color systems transformation functions and color analysis functions. The color systems supported are RGB, XYZ, L*a*b*, L*u*v*, YUV, YIQ, ISH, LSH, VSH, LCH and YSH. EasyColor provides efficient means to convert images between these systems and to transform color images into gray level images and vice versa.

**EasyMatch Description**

EasyMatch is a gray-level and color pattern matching library. It lets you train the system on a reference pattern and afterwards locate its occurrences in other images. This tool is very convenient when the position of a given part is unknown in the field of view, or if the presence of parts must be controlled. The library works by using normalized correlation method, i.e. measuring discrepancies between the pattern and the target image.

**EasyFind Description**

Based on an innovative feature-point technology, EasyFind is designed to rapidly find one or more instances of a reference model in the image. Compared to normalized correlation, EasyFind features faster processing and improved robustness. It shows excellent performances when handling instances that are highly degraded due to noise, blur, occlusion, missing parts or unstable illumination conditions.

**EasyBarCode Description**

EasyBarCode is a library designed to automatically locate and read bar codes. Bar codes encode short character string and are widely used for marking and identifying goods. EasyBarCode is able to identify and read a wide range of standard commonly-used symbologies as well as special symbologies. EasyBarCode automatically locates the bar code symbol in the image and supports code rotation. Moreover for prototyping or special cases, an advanced manual location mode is also available.

**EasyMatrixCode Description**

Data Matrix codes are widely used for parcel tracking and part identification in the semiconductor, pharmaceutical and mechanical industries. EasyMatrixCode is a fully automatic reader of 2D Data Matrix codes. It recognizes symbols of any size, contrast, location and orientation in a single operation. Error detection and correction algorithms are used to provide a reliable reading. EasyMatrixCode is fully compatible with the ANSI/AIM BC11-1997 standard. EasyMatrixCode2 now supports the Data Matrix Rectangular Extension (ISO/IEC 21471,DMRE).

**EasyQRCode Description**

QR codes are 2D bar codes. They are widely used for their fast readability, high reliability and their large storage capacity compared to ordinary barcodes. EasyQRCode is a robust QR code reading library for industrial applications such as part identification and product or time tracking. These applications typically require the fast and reliable decoding of variable-content QR codes.

**EasyOCR Description**

EasyOCR is a font-dependent printed character reader based on a template matching algorithm. It has been designed to read any kind of short text (part numbers, serial numbers, expiry dates, manufacturing dates, lot codes,...) printed on labels or directly on parts.

**EasyOCV Description**

© EURESYS S.A. Subject to change without notice
EasyOCV is an optical character verification tool used for mark inspection. It provides automatic training of the model, adjustable acceptance levels and a robust gray-scale analysis. EasyOCV is suitable for various mark inspection and label printing verification applications. It can detect blurred, misaligned, distorted or double marks, extra or missing ink, missing characters or reversed marks as well as contrast problems.

Neo Licensing System

- Neo is the new Licensing System of Euresys. It is reliable, state-of-the-art, and is now available to store Open eVision and eGrabber licenses.
- Neo allows you to choose where to activate your licenses, either on a Neo Dongle or in a Neo Software Container. You buy a license, you decide later.
- Neo Dongles offer a sturdy hardware and provide the flexibility to be transferred from a computer to another.
- Neo Software Containers do not need any dedicated hardware, and instead are linked to the computer on which they have been activated.
- Neo ships with its own, dedicated, Neo License Manager, which comes in two flavours: an intuitive, easy to use, Graphical User Interface and a Command Line Interface that allows for easy automation of Neo licensing procedures.

Applications

Machine Vision for the Electronic Manufacturing Industry
- High speed image acquisition for AOI, 3D SPI, 3D lead/ball inspection machines.
- Very high resolution line-scan image acquisition for Flat Panel Display inspection and solar cell inspection

Machine Vision for the General Manufacturing Industries
- High frame rate image acquisition for inspection machines
- Line-scan image acquisition for surface inspection machines
- Line-scan image acquisition for textile inspection

Machine Vision for the Printing Industry
- High speed line-scan image acquisition for printing inspection machines

Video Acquisition and Recording
- High-frame-rate video acquisition for motion analysis and recording

Specifications
EMEA

Euresys SA
Liège Science Park - Rue du Bois Saint-Jean, 20
4102 Seraing - Belgium
Email: sales.europe@euresys.com

EMEA

Sensor to Image GmbH
Lechtorstrasse 20
86956 Schongau - Germany
Email: sales.europe@euresys.com

AMERICA

Euresys Inc.
316 Prado Way
Greenville, SC 29607 - United States
Email: sales.americas@euresys.com

ASIA

Euresys Pte. Ltd.
750A Chai Chee Road - #07-15 ESR BizPark @ Chai Chee
Singapore 469001 - Singapore
Email: sales.asia@euresys.com

CHINA

Euresys Shanghai Liaison Office
Unit 802, Tower B, Greenland The Center - No.500 Yunjin Road, Xuhui District
200232 Shanghai - China
Email: sales.china@euresys.com

CHINA

Euresys Shenzhen Liaison Office
Room 1202 - Chinese Overseas Scholars Venture Building
518057 Shenzhen - China
Email: sales.china@euresys.com

JAPAN

Euresys Japan K.K.
Expert Office Shinyokohama - Nisso Dai 18 Building, Shinyokohama 3-7-18, Kohoku
Yokohama 222-0033 - Japan
Email: sales.japan@euresys.com

More at www.euresys.com