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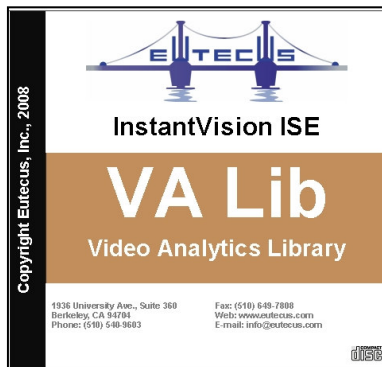
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Video Analytics Library New in InstantVision 3.0



Powerful tools to rapidly develop video analytics applications for security/surveillance

The Video Analytics Library™ (VA Lib™) is a collection of functions designed to enable software developers and system integrators to create video content analysis applications for the rapidly expanding video security market. The VA Lib is specially designed for ease-of-use and the robustness of its pixel-intensive front-end processing, allowing application developers and systems integrators to focus on the higher-level event detection and control systems.



Video analytics applications can be quickly developed by defining events that will be detected based on certain characteristics of objects appearing in the incoming image sequence (i.e. the digitized video signal of a camera). Moving objects are separated from the background using the VA Lib's powerful FrontEnd module while the objects are identified and tracked, and events are detected by the BackEnd module. Criteria (or rules) for event detection can be easily set up – by using VA Lib via C++ function calls – based on object size, speed and temporal behavior over a predefined area of the input image.

For example, suppose that the end user wishes to be alerted when a person has been loitering too long in a certain area of the screen, but doesn't wish to be alerted by cars parking in that area, or by small animals. The developer would first create an "event", and then assign to it the combination of conditions that will result in an alert. First, they set the region of the screen that interests them. The rest of the screen will be ignored for this event. Second, they set the object size that interests them. Third, they set the duration—say 30 seconds. The end result—if a human-sized object appears in the selected area and doesn't leave after 30 seconds, a loitering alert is triggered.

Any number of different detection rules (or events) can be specified using the built-in methods for defining size, speed and temporal behavior. If the user wishes to use other methods, they have the full list of objects with their location, size and speed available for every frame, which they can freely use to define events of any level of complexity.

The VA Lib comes with built-in examples that help programmers speed up application development.

Taking advantage of the InstantVision ISE development environment, the VA Lib can be ported to any platform and also comes ready for use on a PC facilitating rapid prototyping.

The VA Lib is highly optimized to run on the powerful TMS320C64xx series of DSPs from Texas Instruments. Developers programming for the TI platform will enjoy a substantial boost in speed because the algorithms were designed to take full advantage of a number of characteristics specific to those DSPs.

Developers writing applications specifically for Eutecus' Bi-i V301F, the newest model of the Bi-i series of Intelligent Cameras that won the Vision 2003 Product of the Year Award, can take advantage of Eutecus' C-MVA™ technology, in which an FPGA becomes the FrontEnd processor while the DSP acts as the BackEnd only, greatly increasing overall performance.

Also available is a customizable stand-alone Video Analytics Graphical User Interface for PC which can be used for prototyping typical applications without any programming and for demonstrating the capabilities of the Video Analytics library.

The VA Lib uses certain functions from the InstantVision MTT, SI, and SIF Libraries. All four libraries can be purchased together as a special software bundle.

Contact Eutecus at (510) 540-9603 or at info@eutecus.com to learn more about the Video Analytics Library