Applied Intelligence

May 2023

The latest v2.1.0 release introduces a new VCAbehaviour licence, encapsulating a number of new algorithms designed and focused on the detection of specific object behaviours. In addition, a host of new features and quality of life improvements have also been added to VCAserver.

Deep Learning People Tracker (DLPT)

VCA has redeveloped and updated the DLPT to utilise the detection of heads and the upper body to improve detection range and performance in dense and busy scenes. Providing improved tracking and detection in complex or crowded environments or where highly accurate counting is required.





Introduction of the VCAbehaviour licence

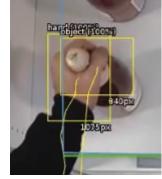
This new licence type encapsulates a number of behaviour detection algorithms that fall outside of the standard use cases covered by the VCAproAl licence. VCAbehaviour introduces the **Hand Object Interaction** (HOI) Tracker, the **Aggressive Behaviour** rule and includes the reworked **Deep Learning Skeleton Tracker** (DLST) and **Fall Detection** rule.

Aggressive Behaviour Detection

Aggressive Behaviour is a new detection algorithm that analyses the whole field of view, over a set number of frames, and estimates the likelihood that a fight is occurring.

Hand Object Interaction (HOI) Tracker

The HOI Tracker is a new algorithm that allows for the tracking of hands and objects held in that hand. As with all VCA tracked objects, zones and rules can be utilised to create advanced behaviour detection rules applicable to retail shelf protection to prevent shrinkage as Self Checkout terminals.



Quality of Life Improvements

- Repeatedly Rule: generates an event when an input rule is triggered a set number of times within a defined period. This allows for rule configurations such as, trigger event when a person enters a zone three times in four seconds.
- Counter Reset: allows a rule to trigger the counter to reset to 0.
- UI support for SSL and Certificates: allowing for a self managed end to end encrypted connection between your browser and the back end services.
- ONVIF Events: Events have now been added to our ONVIF integration allowing for events triggered by our rules to be consumed by external applications.

For more information see http://www.vcatechnology.com or Contact info@vcatechnology.com