



# VI DIMENSIONS

Video Insights on a new dimension

Powered by patent pending **Abnormality Detection** technology

## Vi Dimensions' ARVAS

ARVAS is an unsupervised Machine Learning system which analyses vast amounts of real-time streaming (or archived) video data autonomously for abnormal behaviors and events. It does not require human intervention to automatically discover dominant motion patterns which means that unlike conventional systems, it does not require a human to specify rules necessary for detection. This translates to immediate value to the customer not only in terms of security and surveillance but also improves the organisation's safety, operational and maintenance aspects.

- **No need to specify or configure any rules.**
- **Discovery of abnormal or suspicious behaviours in almost any scene.**
- **Conversion of live streaming video to value for any organization.**

### Key Product Features:

- **Identify patterns** - System is able to automatically identify motion patterns (i.e. motion, trajectories) of people, vehicles and objects in scenes.
- **Discover deviant patterns and behaviours** - System is able to find deviations and abnormalities to warn of potential threats (even those not known beforehand).
- **Scan autonomously** - It is scan through vast amounts of constantly streaming (or archived) video autonomously.
- **Not limited by prior human knowledge** - Discovery of abnormal events is not limited by prior human knowledge because the system is intelligent enough to self-learn and adapt to different and continuously changing scenarios.
- **Integration with existing systems** – ARVAS can be easily added onto customers' existing video analytic systems and video management systems to enhance surveillance coverage of their cameras.
- **Top 10 search** - System is able to list the top 10 most abnormal events based on camera or geographical locations so that users can just focus on these events.
- **Pro-active approach** - Abnormal events discovered may surface safety, security, operations and/or maintenance implications which could lead to more pro-active follow-up actions depending on its impact on the user and the organization.

Learn more about ARVAS at:

[www.vidimensions.com](http://www.vidimensions.com)





**Security Monitoring** – The system is able to discover suspicious behaviours deviant from the normal patterns learnt from the activities in a scene.



**Safety Monitoring** – The system is able to discover events which have safety implications.



**Operations Monitoring** – The system could alert rare and inconsistent occurrences that could signify an unauthorized activity taking place.



**Maintenance Monitoring** – The system is able to surface inconsistencies and defects occurring in the video streams.

Request for a demo on ARVAS at:

[enquiries@vidimensions.com](mailto:enquiries@vidimensions.com)

### Key User Benefits:

- **Massive manpower savings** – Human operators are not needed to eyeball and monitor the thousands of cameras for events.
- **Improved flexibility and capability** – Users need not define rules as the system can self-learn and detect abnormalities.
- **Improved efficiency** – Users can be more proactive and not reactive since the system can notify the user ahead of time to potential threats based on abnormal events and occurrences he was not actively looking for.
- **Increased surveillance coverage** - Previously only about 10% of cameras deployed can use rule-based analytics. Our technology can increase this potentially to 100% coverage.

### Contact:

Vi Dimensions Pte Ltd  
 16 Ayer Rajah Crescent  
 Tempco Technominium #05-04  
 Singapore 139965  
 Tel: +65 65702331  
[www.vidimensions.com](http://www.vidimensions.com)  
[enquiries@vidimensions.com](mailto:enquiries@vidimensions.com)

