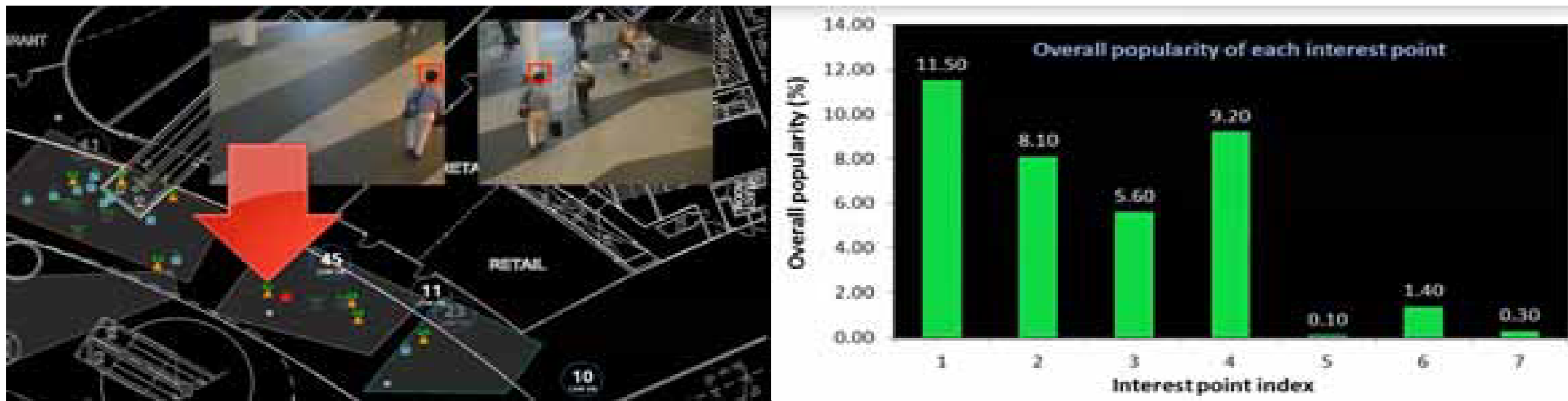


SITUATIONAL AWARENESS ANALYTICS INTELLIGENT SURVEILLANCE TOOL



CHALLENGES

For most businesses, video surveillance has to be done manually and it is a large-scale operation that requires 24/7 monitoring. The monitoring is very tedious and may generate inconsistent results. Though there are commercial, off-the-shelf systems, the systems are not able to overcome adverse operating conditions, such as challenging outdoor conditions, such as challenging outdoor conditions and high crowd density.

OUR SOLUTION

A*STAR's Institute for Infocomm Research (I²R) has developed the Situational Awareness Analytics, an intelligent video surveillance system that works in real-time. It allows for highly customized solutions that are optimised in deployment. The system is able to perform security and safety-related applications based on either real-time footage from CCTV cameras or pre-recorded footage. It works on video streams of stationary CCTV cameras and also those from moving platforms (such as Unmanned Aerial Vehicle). The use of Situational Awareness Analytics will increase human resource efficiency, increase the accuracy of business analytics and ultimately generate cost savings.

BENEFITS

The Situational Awareness Analytics system is able to perform the following tasks:

- Human crowd detection
- Crowd Analytics
- Aggression Detection
- Multi camera tracking
- Target Search
- Deep visualisation for Global situational picture
- Computer graphics assisted platform for optimal VA deployment
- Data mining from video semantics

APPLICATIONS

Past applications include:

- Traffic analytics & licence plate reader
- Container number recognition system
- HDB Lift Monitoring
- Crowd Counting
- Situational Picture

(From top left)

1) A snapshot of the system detecting and tracking a person

2) A bar chart that indicates the popularity of a particular point of interest

