Dahua TechMonth Featuring WizMind:
3 Practical Monitoring Applications of Human-based Video Metadata

In surveillance monitoring context, <u>video metadata</u> refers to the structured details that you can possibly extract from a given video footage. It is a data that provides information about other data – a *"data about data"* in short.

Human-based video metadata, as its name suggests, are data derived from human targets in the monitored scene. It can be utilized based on user's requirements to significantly enhance the management and operation of various application scenarios, while carefully maintaining people's privacy at the same time.

To give you some insights into its practical usage, here are three conventional applications of human-based video metadata that you can adopt based on your own monitoring needs:

Search Targets & Generate Statistics

One of the most common applications of human-based video metadata is for target searching after an event. Intelligent surveillance devices, such as the Dahua <u>WizMind</u> products, offer Quick Target Search function that can locate suspects in time using their physical attributes. Target attributes include beard, glasses, mask, hat, etc., which are continuously being developed and increased to meet the requirements of various application scenarios. Irrelevant targets in the captured images are also filtered out by the back-end devices (<u>IVSS</u>, <u>NVR</u>) or by the platform. It can capture up to 640* targets (with attributes) per second with an impressive detection rate of 98%*.

In addition, another useful application of the human-based video metadata technology is for target statistics. WizMind counts in real time the human targets in

the monitored scene and filters them based on target category and direction. The directions include A>B, B>A, or A<>B. And to top it up, it can also generate reports by year, month, and day. It can capture up to 96** objects per frame, providing a detection rate of 98%** and accuracy rate of 96%**.

Detect PPE Wearing

Wearing of personal protective equipment or PPE is a must in any construction site. Depending on the scope of the project, monitoring proper wearing of PPEs in the site could be a tough challenge to implement.

The latest PPE Detection Technology of Dahua WizMind can detect wearing of commonly used PPEs in construction sites including safety hats, protective vests, face masks, and glasses. It can even detect the color of the uniforms (top and bottom) of workers. When a violation has been detected, the site supervisor or manager can be notified via the DMSS mobile app. Similar to target searching and statistics functions, it also offers a detection rate of 98%**, with accuracy rate of 96%**.

To see WizMind's PPE detection in action, check out this video.

*based on the maximum performance of WizMind IVSS7000-16M
**based on actual performance of WizMind IPC 7 series

Aid City Road Planning

Who would have thought that aside from vehicle-related data, statistics related to people on the street can also be useful in planning city roads? By collecting attributes of pedestrians, directions, and time periods, local road planning departments can design better roads tailored for road users and commuters.

One good example is the Dahua solution developed for a local organization in Ireland. Aside from motor vehicles and non-motor vehicles, metadata of pedestrians are also captured on main city roads, and streets around plazas. These data are then securely transferred to an SFTP server for further data analysis. The data summary are relayed to the local transportation department to help them plan and manage streets more efficiently.

Key Takeaways

Human-based video metadata can be effectively utilized to optimize monitoring operation of various application scenarios. Metadata based on human targets can be used to search suspects after an event, and to generate accurate statistics of the people in the monitored scene. Also, these structured data can be

used to detect proper wearing of PPEs in a particular site, and help local transportation departments in planning and maintaining city roads to benefit the general public.

For more information about Dahua WizMind devices, you can check out this video or visit our Global Innovation Center webpage.

Up Next…

For next week's Dahua TechMonth article, we'll continue to show you how the human-based WizMind can help optimize business operation and customer service in retail scenarios, and highlight the benefits it can bring to both business owners and consumers. Don't miss it!