There is an increasing demand for artificial intelligence-powered surveillance solutions

The growing video surveillance market is driving demand for advanced video analysis technologies. Businesses and organizations from all vertical sectors are looking to leverage the benefits of enhanced detection accuracy and flexibility provided by deep learning to solve their security, safety, and operations challenges.

Moreover, the challenge of monitoring video surveillance is becoming more acute as businesses and organizations across an array of industries rely more and more on visual data capture, which demands simultaneous analysis of vast volumes of video footage. To address these challenges, these organizations require a solution that:

- Enables AI capabilities at or near the edge, such as deep learning inference
- Scales video surveillance solutions for public safety visual monitoring across cities, large premises, and campuses

Only Intel can deliver the most comprehensive array of intelligent vision capabilities to the wider market

The Intel® Vision Products portfolio is comprised of silicon, software tools, deep learning frameworks, and libraries that are uniquely positioned for the next generation of IoT vision. Intel® Vision Products are helping put your data to work, from the edge to the cloud, so you can act in real time, make decisions faster, and implement new operational strategies to drive immediate results.

At the hardware level, Intel has amassed the most comprehensive selection of acceleration silicon in the industry, including Intel® CPUs, CPUs with integrated graphics, Intel® Movidius™ VPUs, and Intel® FPGAs. Intel also offers an array of software tools, including the Open Visual Inference and Neural Network Optimization (OpenVINO™) toolkit, for accelerating the development and integration of intelligent vision solutions and capabilities. This end-to-end portfolio helps scale and integrate vision capabilities across your entire end-to-end infrastructure — whether for premises, campuses, or city-wide applications.

“With OpenVINO™ toolkit the results have been impressive, enabling us to move from supporting 3 cameras to 14 with one developer, in under three weeks. We will be able to fully scale our solutions to the edge with the right performance per dollar while leveraging Intel® Movidius™ VPU and Intel® FPGA solutions.”

—Zvika Ashani
CTO and Co-Founder, Agent Vi*
Agent Vi delivers market-leading video analytics solutions based on cutting-edge AI technology that deploys deep learning algorithms

**Agent Video Intelligence (Agent Vi)** is the number one global video analytics software provider in the market, delivering high-performance on-premise and cloud-based video analytics solutions for multiple intelligent video applications. The company’s market-leading technological position is based on patented software architecture for distributed image processing, advanced computer vision algorithms, and expertise in software development.

**Agent Vi’s innoVi** leverages cutting-edge deep learning technology to transform the hundreds, or even thousands, of cameras deployed across a city into smart video devices, contributing to the city’s ability to improve security, safety, and incident response city-wide.

**The Open Visual Inference & Neural Network Optimization (OpenVINO™) toolkit is the centerpiece of computer vision solutions**

The OpenVINO™ toolkit is a free, downloadable toolkit within the Intel® Vision Products portfolio that fast-tracks the development of high-performance computer vision and deep learning inference into vision applications. The OpenVINO™ toolkit optimizes inference on multiple Intel® architectures, including CPUs, CPUs with integrated graphics, Intel® FPGA, and Intel® Movidius™ VPUs.

The OpenVINO™ toolkit enables accelerated computer vision performance, shortened vision solution development, and streamlined deep learning inference and deployment.

**The OpenVINO™ toolkit enables optimized inference capabilities and enhanced visual detection accuracy for Agent Vi’s innoVi Edge appliances**

Before utilizing the OpenVINO™ toolkit, innoVi handled deep learning inferencing in the cloud, with the innoVi Edge appliance only performing visual decoding operations. Agent Vi and Intel saw this as an opportunity to make innoVi both more cost-effective and scalable by deploying the OpenVINO™ toolkit. Through development on the OpenVINO™ toolkit, innoVi Edge appliances can now perform advanced deep learning inference with more visual analysis accuracy at the edge.

This newfound capability drives efficiencies for innoVi deployments because processing at the edge offloads inferencing from the cloud, reducing the required bandwidth between innoVi Edge appliances and cloud servers.

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The Open Visual Inference and Neural Network Optimization (OpenVINO™) toolkit is helping Agent Vi deliver better video intelligence performance across a wide range of applications

Public Safety & City Surveillance
- Crime, violence, terrorism, vandalism
- Illegal and/or excessive crowding
- Unauthorized movement in restricted areas
- Abandoned objects

Critical Infrastructure
- Perimeter protection of remote sites
- Loitering in sensitive, sterile zones
- Safeguard assets for uninterrupted operations
- Situational awareness

Transportation & Public Transit
- Traffic management
- Obstacles, slip and fall scenarios
- Transit Platform/track security
- Statistics and path analysis

Campus & Education
- High-value asset protection
- Unauthorized after-hours access
- Security and safety incidents
- Post-event investigation

Learn more
Read about relevant Intel and Agent Vi products:
- Intel® Vision Products
- Agent Vi’s innoVi Solution*

OpenVINO™ toolkit:
- OpenVINO™ Toolkit Editorial
- OpenVINO™ Toolkit Developer Page

2. IHS Market Report, October 2017

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