VANTIQ

The smart way to secure borders and facilities
Perimeter Security & Threat Management

OVERVIEW

This Perimeter Security & Threat Management solution combines world leading expertise in optical fiber sensing, AI orchestration & IoT sensor fusion capabilities to enable real- time situational awareness for Critical Infrastructure, National Security & Private Sector Enterprises.

The solution can detect vibration from people or cars, listen to sound from conversations or events, analyze any threats using artificial intelligence in real- time and alert the right officials to take action. Patent pending real-time GenAI capabilities dramatically reduce hallucinations, enable natural language search & collaboration with the system as the situation evolves.

REAL-WORLD APPLICATIONS

Next generation perimeter security & threat management leveraging Computer Vision, Drones & Generative AI enables real-time situation awareness to secure our borders and facilities.
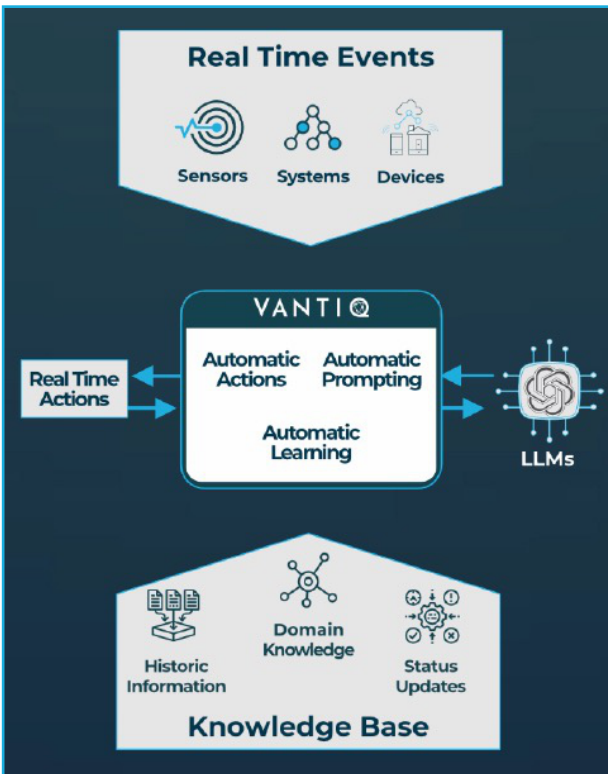
Airports

Borders

Venues

Schools & Businesses

Features

Fiber Sensing Vibration & Sound Detection

Computer Vision Enabled Object Detection

Automated Drone/Robot Surveillance GenAI

Enabled Collaboration

Gunshot Detection

SOLUTION

The solution integrates best of breed technologies from Vantiq's ecosystem including NEC's fiber sensing, facial recognition, and video analytics technologies together in one interface enabling real-time situational awareness to detect unwanted intruders & alert officials before it becomes a threat. A centrally located INTERROGATOR box sends and receives light into and from optical fibers that are covertly buried and/or fence-mounted or wall-mounted along borders and facility perimeters. Other data from the environment, cameras & sensors can be integrated and analyzed in real-time to add more context to the evolving situation. When physical intrusions such as vibration or sound from people, cars or objects are detected, cameras turn to the geo location and AI automatically analyzes the situation. Leveraging GenAI and real-time data, the system automatically provides relevant information and enables real-time collaboration with the right stakeholders until situation is resolved.

Sense ➤➤ **Analyze** ➤➤ **Act**

REAL-TIME + GENERATIVE AI

A customizable graphical user interface displays a border and/or facility map, denotes the location of detected physical intrusions, and provides actionable data. Leveraging this real-time data & generative AI, the solution will automatically alert border patrol, law enforcement, city operators & security services of any critical events and collaborate with key stakeholders in natural language to further analyze & resolve a given situation of interest.

Situationally Aware

AI enabled detection of objects, people, and threats using cameras & sensors.

Contextually Relevant

Enriched with real-time data and private enterprise data to enable accurate GenAI responses.

Automated Prompting

Automatically trigger actions based on detections enabling man machine collaboration in natural language.

VANTIQ

Vantiq is the first commercially available platform to easily create real-time edge-to-cloud software solutions. By combing sensor intelligence, edge processing, and Generative AI, Vantiq solutions are situationally aware of what is happening and can effectively orchestrate, in real-time, actions across humans, machines, and business systems. Vantiq powers a broad array of applications where the right decisions at the right time can mean the difference between life or death.

NEC

Headquartered in Irving, Texas, NEC Corporation of America is a leading technology integrator providing solutions that improve the way people work and communicate. We deliver one of the industry's strongest and most innovative portfolios of communications, analytics, security, biometrics and technology solutions that unleash customers' productivity potential. Learn more: www.nec.com/en/global/solutions/ofs/index.html

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