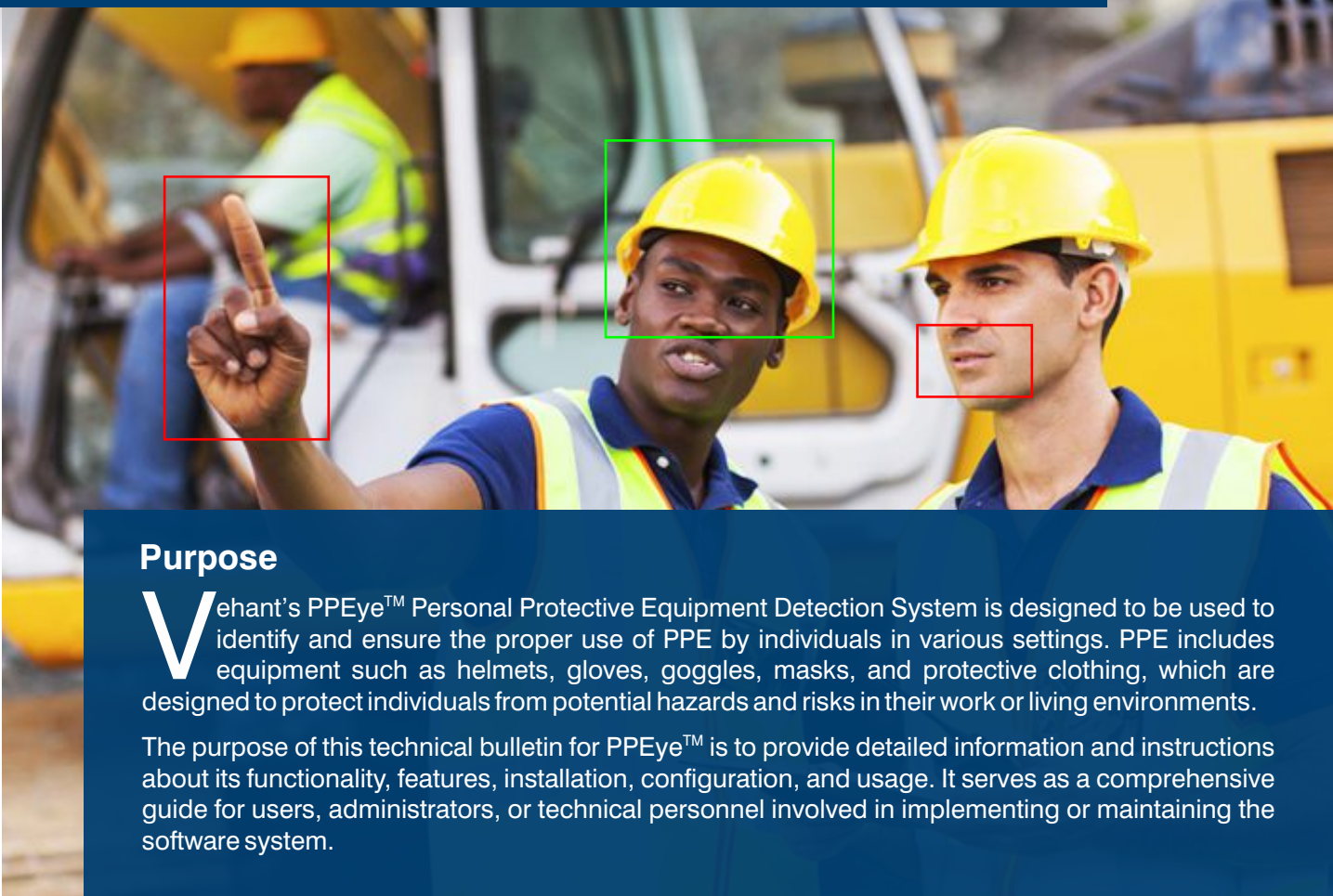# AI powered Image Analytics Solution for PPE Detection

Purpose

Vehant's PPEye™ Personal Protective Equipment Detection System is designed to be used to identify and ensure the proper use of PPE by individuals in various settings. PPE includes equipment such as helmets, gloves, goggles, masks, and protective clothing, which are designed to protect individuals from potential hazards and risks in their work or living environments.

The purpose of this technical bulletin for PPEye™ is to provide detailed information and instructions about its functionality, features, installation, configuration, and usage. It serves as a comprehensive guide for users, administrators, or technical personnel involved in implementing or maintaining the software system.

Background

As a result of the statewide impacts of safety and hygiene during the pandemic, the production of personal protective equipment (PPE) proved to be an economically viable product category and a lifesaver in those trying times. The need of PPE has struck the chord among the enterprises, making them genuinely think about the health and safety of their workforce. They conduct work site assessment and ensure the need of PPE. Once the need and the use of PPE is established in the organizations, they face a challenge with the workforce about complying with the use of the PPE in their work.

A major challenge businesses face is to enforce and reduce safety hazards, despite creating elaborate safety policies and procedures. The solution is highly adaptive and can be deployed in any industry vertical from FMCG, Oil and Gas, Heavy Industries, Refineries, Automobiles, Cement and Chemicals etc.

Benefits of the Solution

Workplace Safety

PPEye™ helps monitor and enforce the use of appropriate protective gear, minimizing the risk of accidents, injuries, or exposure to harmful substances.

Compliance and Regulations

PPEye™ helps organizations ensure compliance with these regulations, avoiding penalties, fines, or legal liabilities.

Risk Mitigation

PPEye™ acts as a proactive measure to mitigate these risks by continuously monitoring and detecting whether individuals are wearing the required protective gear. They provide real-time alerts or notifications to prompt individuals to wear PPE correctly or take corrective actions.

Accountability and Training

By monitoring and recording PPE usage, organizations can track compliance, identify areas for improvement, and provide targeted training or reminders to individuals who may require additional guidance or education.
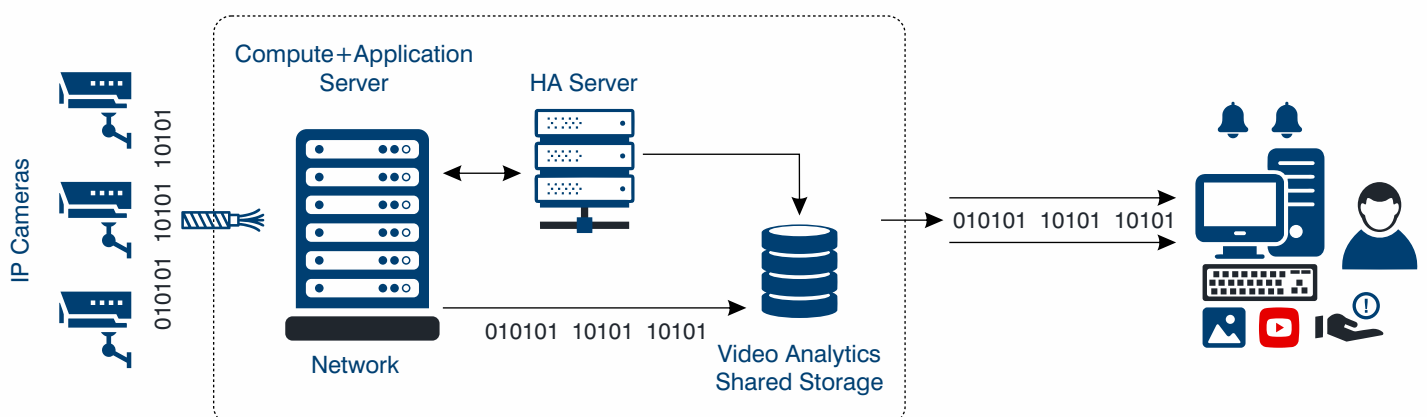
Data Analysis and Continuous Improvement

PPEye™ generates data and insights regarding PPE usage patterns, trends, or non-compliance instances.

Protective Equipment Detection

Block Diagram

White Paper by Vehant Technologies

What you need, to run
PP EYE ™ smoothly?

01 Remote system installation and configuration support

02 The system requires a stable internet connection of 2 Mbps Bandwidth.

03 The cameras should be positioned so that they can provide a clear FOV and are not occluded.

04 Normal level of lighting is needed, i.e. between LUX 300-500 units

OKEAN Advanced AI based Video Aalytics platform analyses, extracts and generates actionable information from the humungous amount of video and image data. Powered by AI and DL, it is designed to serve as an intelligent decision support system to users.

The solution features Intel Core™ i7 or i5 Processors, Intel Distribution of OpenVINO™ toolkit and Intel Media SDK.

Learn more about Vehant Technologies
www.vehant.com