SIH1604

Women Safety Analytics – Protecting Women from Safety Threats

Background:

With the growing concern over women’s safety and the increasing number of crimes against women in various cities, there is an urgent need for advanced surveillance and analytical solutions to mitigate these threats. A promising approach to address these concerns involves real-time threat detection software that uses advanced analytics to enhance public safety.

Detailed Description:

Women Safety Analytics aims to create a safer environment for women by providing real-time monitoring and analytical insights. The software leverages advanced technologies to detect potential threats and anomalies in real-time, allowing for immediate intervention by law enforcement. By continuously monitoring scenes and analyzing patterns, the system identifies unusual situations, such as a lone woman at night or gestures that might indicate distress, and generates alerts to prevent possible incidents.

The system's proactive approach in detecting anomalies and generating alerts enhances public safety and creates a secure atmosphere for women. Additionally, the software's ability to count the number of men and women present in a specific location and at particular times offers insights into gender distribution, further aiding safety measures.

Advantages of the System:

- **Real-time Monitoring and Alerts:** Provides immediate alerts to law enforcement, creating a safer environment for women.
- **Early Detection:** Enables law enforcement to intervene promptly before a situation escalates into a crime.
- **Data-Driven Insights:** Continuous analysis helps identify hotspots and trends, aiding in strategic planning and resource allocation for city safety.

Expected Solution:

Women Safety Analytics software should include the following functionalities:

1. **Person Detection and Gender Classification:**
    - The system should accurately detect individuals in the surveillance area and classify them by gender.
2. **Gender Distribution Analysis:**

- It should continuously monitor and count the number of men and women present in the scene, providing insights into gender distribution at different locations and times.

3. **Lone Woman Detection at Night:**
   - Identify situations where a woman is alone at night, which may indicate a potentially vulnerable situation.
4. **Detection of a Woman Surrounded by Men:**
   - Detect scenarios where a woman is surrounded by multiple men, which could signal a threat.
5. **Recognition of SOS Situations through Gesture Analytics:**
   - Analyze body language and gestures to identify distress signals or SOS situations, triggering immediate alerts.
6. **Hotspot Identification:**
   - Identify areas where incidents are more likely to occur based on past alerts and historical data, enabling targeted safety measures.