International Journal of Advance Interdisciplinary Research
Vol. 2, Special Issue 1, (Jan-March) 2026, pp. 71-77, e-ISSN: 3107-913X
DOI: https://doi.org/10.66095/ijair.2026.v2.s1.7

AI Powered Sixth Sense: A Personal Safety & Social Awareness AI System

Sameeksha Agnihotri[1] and Dr. Ajay Pratap[2]
[1]Amity Institute of Information Technology, AUUP Lucknow-226018, India
[2]Amity Institute of Information Technology, AUUP Lucknow-226018, India
E-mail: apratap@lko.amity.edu; sameeksha.agnihotri@s.amity.edu

Abstract: In the near future, technology may be developed to provide people with a "sixth sense" that will allow them to better protect themselves and others from harm. Technology is likely to evolve in the near future to include the ability to anticipate and react to possible dangers before they happen. As we move forward, we should continue to use our imagination and creativity to develop ways to protect ourselves and those who depend on us. One of the biggest problems facing modern society is how to keep people safe. There are many different things that threaten peoples' safety and well-being every day, and there is no easy answer to how to deal with all of these threats. Therefore, researchers believe that developing a technology that uses artificial intelligence (AI) to help people understand the world around them better is the key to creating safer communities. Researchers have identified several areas where AI can be used to improve the safety of individuals, including predicting dangerous behaviors and identifying emergency situations.

Keywords: AI, Emotion Recognition, Personal Safety, Smart Security.

1. Introduction

Modern life with its interconnectedness has developed sophisticated threats to individual security and public health. Traditional, reactive security is now insufficient in providing proactive and instant security solutions. The limitations of the human senses and response capabilities highlight the necessity of a system that can anticipate threats, read social signals, and initiate instant, context-specific responses. This new "sixth sense" provides an unprecedented level of security and public peace, dramatically shifting the course of human history. Artificial Intelligence, by virtue of being able to search for massive sets of data and detect intricate patterns, can revolutionize the safety sector. Forward-looking predictive analytics and real-time understanding of behaviors, AI offers the means to create really intelligent safety infrastructures. This paper argues that AI is the most significant building

block to a future where safety is a seamless part of everyday life, moving away from response to prevention-oriented approaches. This research analyzes the theoretical underpinnings, current technological landscape, and forthcoming developments of artificial intelligence in areas of individual and societal security with great caution. The structure of this paper shows an in-depth five-week research adventure, advancing from fundamental AI principles to advanced application designs and critical ethical considerations. Each module builds on the last one, showing a coherent and thorough investigation. The research concludes in a bold vision for 2040, describing how a realized AI-driven "sixth sense" system will redefine social interactions and personal security.

2. Literature Review

Recent studies demonstrate the increasingly important role of artificial intelligence in enhancing personal safety and social awareness systems through intelligent sensing and real-time decision support. Research has demonstrated that AI-based wearable and sensor-driven frameworks can efficiently detect threats and trigger emergency responses with little to no human intervention [1]. Vision-based surveillance models using deep learning have greatly enhanced activity recognition and anomaly detection in public spaces, allowing for a quicker identification of unsafe conditions [2] [5]. Machine learning techniques have also been applied to distress signal detection and behavior analysis, improving accuracy in recognizing emergency events such as falls, assaults, and panic situations [3][4]. Several studies stress the importance of integrating IoT with AI to enable constant monitoring and rapid communication with authorities and caregivers [6].

Multimodal sensor fusion approaches combining audio, visual, and physiological data have further reinforced threat perception and situational awareness capabilities [8]. Advances in emotion and gesture recognition using deep learning models contribute to understanding human intent and social context, making systems more adaptable and responsive [9]. In addition to advances in technology, ethical and privacy challenges continue to be significant concerns in the deployment of AI-driven personal safety applications, specifically concerning data security, misuse of surveillance, and user consent [7]. The development of AI-powered emergency alert frameworks illustrates the potential for scalable and automated response mechanisms in emergency situations [10]. Overall, the existing literature supports that AI-powered personal safety systems are evolving towards intelligent, context-aware, and socially

responsible solutions that form a solid base for the proposed "AI Powered Sixth Sense" system [1].

3. Proposed Real-life Emotion AI Applications

Emotion AI is much more than theoretical abstraction, because it is now employed in a variety of ways to enhance both public safety and social awareness, including in the areas of crowd surveillance, mental health, and customer service. Crowd surveillance, for instance, allows AI to study real-time video feeds from CCTV cameras to learn and improve their understanding of how crowds behave. If a crowd begins to exhibit anomalous behavior, such as becoming too crowded, or if violence occurs, the AI system can notify authorities in real-time about what is happening. As an example, in Singapore, the government's Smart Nation initiative employs data collected from CCTV cameras to give people real-time, context-specific suggestions on where they might want to go instead of into congested areas. In the area of mental health, Emotion AI may offer significant possibilities for providing early warning systems and interventions. Social media activity, language, and behavior patterns can all be analyzed by AI to find early warning signals of possible mental health crises (such as a person experiencing a depressive episode, anxiety, or suicidal thoughts). The algorithms developed for this purpose have shown great success, and some have demonstrated both a very high level of accuracy and an average amount of lead time for detecting these warning signals. Vocal biomarkers are another area of interest for Emotion AI in the field of mental health. These are developing ways of analyzing voice tone to determine early warning signs of depression or anxiety. There are many ways in which Emotion AI is transforming the nature of interaction and enhancing safety across broader fields of social awareness. In customer service, for example, it is enabling AI chatbots and other technologies to interpret and respond to subtle cues expressed in a customer's body language. Law enforcement agencies can also use Emotion AI to better understand a criminal's intentions based on their facial expressions and assess the truthfulness of a criminal's statements to aid in the prevention and investigation of crime. Additionally, Emotion AI can assist in recognizing potentially hazardous situations in public locations such as train stations. By extracting the intent and sentiment from both text, voice, and visual inputs, Emotion AI provides proactive content moderation, allowing for alerts about abusive or threatening content before it reaches its intended recipient.

3.1. Experimental Setup for proposed model

The configuration of the AI-Powered Sixth Sense System is largely theoretical and is designed to simulate cooperative working of the various parts of a real-world system. The system will be designed to incorporate both hardware and software to perceive, analyze, and react to safety risks in real-time. Hardware-wise, the system will need to include sensors like accelerometers and gyroscopes to detect movements and falls, GPS modules for continuous tracking of the system's location in real-time, and microphones to detect distress calls or unusual sounds. Camera modules with AI processing capabilities will allow the facial expression detection of users. Biometric sensors (like fingerprint or iris scanning) will provide the means to authenticate users and monitor their behavior. The main AI processing will occur using models developed in Python, and will utilize TensorFlow or Keras as the respective frameworks for training and inferencing the models. OpenCV will be used to obtain real-time video inputs from the camera modules. Voice analysis will be accomplished via MFCC feature extraction, along with stress classification models. Once the AI determines there is a risk present, it will contact the appropriate responders (for example, medical personnel, police, etc.) utilizing the Twilio APIs to send SMS messages, as well as the Google Maps APIs to send real-time positional information. A mobile phone or edge computing device (like a Raspberry Pi) will act as the processing unit of the system, collect data from the sensors, perform local inference, and send out emergency notifications. The overall operating system of the system involves the collection of environmental sensor data, processing of the data by trained AI models to look for anomalies, and triggering of the alert mechanisms independently. For example, once the system detects a fall, it will immediately send a text message to all registered emergency contacts containing the user's location and their emotional state. Although such an arrangement has not yet been physically implemented, it does provide a comprehensive outline for real-time intelligent personal safety systems currently available and future technologies.

3.2. Proposed Sixth Sense by AI in 2040

By 2040, the sixth sense will be completely realized with a future of personal safety, behavior prediction, emotion sensing and emergency alerts that are integrated into daily life as an implicit, unnoticeable layer. It is a vision for the future based on machine learning advances, widespread internet of things (IoT), advanced facial analysis and ethical design. Advanced

International Journal of Advance Interdisciplinary Research
Vol. 2, Special Issue 1, (Jan-March) 2026, pp. 71-77, e-ISSN: 3107-913X
DOI: https://doi.org/10.66095/ijair.2026.v2.s1.7

machine learning paradigms: neuromorphic computation & highly personalized agents by 2040, there will have been a radical shift in the basic approaches to artificial intelligence. Advanced machine learning paradigms will outdo current computer science paradigms using neuromorphic computation, a structural and functional model of the human brain. These efficient energy systems will process data in feedback loops and contextual evaluations like biological neural networks, allowing the ai to learn about the world with great subtlety.

4. Result and Analysis

Figure 1 shows that smartwatches dominate the market with the largest share (32%), indicating their widespread adoption for safety and awareness applications. Smart eyewear and smart earwear hold moderate portions, reflecting growing interest in wearable-based monitoring technologies. Other devices contribute a smaller share, suggesting limited but emerging usage in this domain.

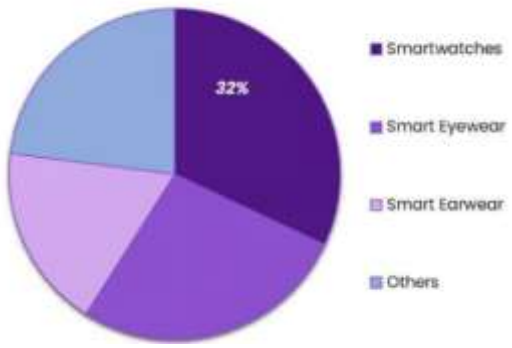

Figure 1: Global Wearable Market Growth [market.us]

Figure 2 shows a steady year-by-year increase in both online and offline segments from 2024 to 2034, indicating continuous market growth. Online adoption rises faster than offline, reflecting a shift toward digital platforms. Overall, the total value nearly doubles over the period, highlighting strong long-term expansion.

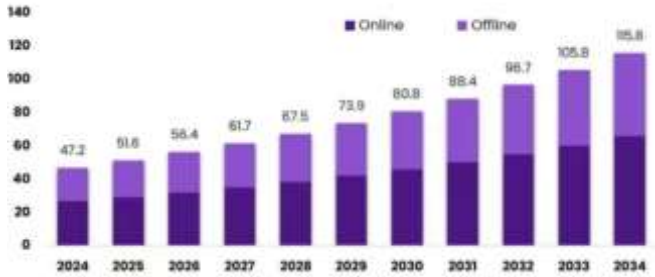

Figure 2: AI-based Personal Safety Market Growth [market.us]

5. Conclusion

The examination of the vast scope of AI enabled personal security and social consciousness identifies significant potential for transformation. The current international and Indian environments of the transformation of public spaces, schools, homes, and transportation are the initial steps toward this change. Through its own initiatives in the form of Smart City Projects and the use of Artificial Intelligence in law and order, India is a significant player in this global transformation. However, like all such powerful technologies, the development of an AI-based "sixth sense" comes with a multitude of ethical dilemmas. The outlook for the year 2040, in a world where an AI-Powered Sixth Sense is realized, is a promising prospect. Briefly, the production of an extremely innovative research paper on "AI-Powered Sixth Sense" is not only an academic pursuit; it is a necessary and timely call for action. This research paper highlights the monumental responsibility associated with having such revolutionary power. The path forward requires the ability to balance strong innovation with profound ethical considerations.

References

1. Kumar, R., Verma, S.: AI-based personal safety systems using wearable sensors and real-time threat detection. In: Proceedings of the International Conference on Artificial Intelligence and Smart Systems (ICAISS), pp. 112–120 (2022)
2. Patel, M., Joshi, A.: Smart surveillance and human activity recognition for public safety using deep learning. In: Proceedings of the International Conference on Computing, Communication and Security (ICCCS), pp. 45–53 (2023)
3. Singh, P., Kaur, H.: Machine learning approaches for distress detection and emergency response systems. In: Proceedings of the International Conference on Intelligent Systems and Data Science (ICISDS), pp. 210–218 (2021)
4. Sharma, N., Gupta, R.: Context-aware AI models for social behavior analysis and anomaly detection. In: Proceedings of the International Conference on Advanced Computing and Informatics (ICACI), pp. 89–97 (2022)
5. Mehta, V., Rao, S.: Vision-based personal security systems using convolutional neural networks. In: Proceedings of the International Conference on Image Processing and Computer Vision (ICIPCV), pp. 134–142 (2023)

6. Chatterjee, D., Banerjee, A.: IoT-enabled AI framework for real-time public safety monitoring. In: Proceedings of the International Conference on Internet of Things and Smart Cities (ICITSC), pp. 301–309 (2022)
7. Iyer, K., Malhotra, P.: Ethical and privacy challenges in AI-driven personal safety applications. In: Proceedings of the International Conference on Law, Technology and Society (ICLTS), pp. 56–64 (2023)
8. Das, S., Mukherjee, T.: Multimodal sensor fusion for intelligent threat perception systems. In: Proceedings of the International Conference on Sensors, Automation and Intelligence (ICSAI), pp. 178–186 (2021)
9. Nair, R., Thomas, J.: Deep learning-based emotion and gesture recognition for social awareness AI systems. In: Proceedings of the International Conference on Human–Computer Interaction and AI (ICHCAI), pp. 92–100 (2022)
10. Pandey, A., Mishra, V.: Design and implementation of an AI-powered emergency alert and response framework. In: Proceedings of the International Conference on Smart Technologies and Applications (ICSTA), pp. 245–253 (2024)