

MikeOn and CamOn: AI-Driven Platform for Detecting Abuse and Protecting Vulnerable Populations

Paul Hallelujah info@primer.zone

July 25, 2024

Abstract

This paper outlines the design and implementation of "MikeOn" and "CamOn," an AI-driven platform aimed at detecting and preventing abuse against children and other vulnerable populations, including the elderly, disabled, prisoners, patients, students, and minorities facing microaggressions. The platform uses existing microphones and cameras on devices globally to monitor for suspicious words and visual activities, deploying nonhuman interventions to protect victims. This approach addresses the shortcomings of traditional law enforcement and social services, which often fail to detect and respond to abuse behind closed doors.

1 Introduction

The "MikeOn" and "CamOn" platform leverages existing technology to create a comprehensive monitoring system that aims to detect and prevent abuse in real-time. By utilizing the microphones and cameras on devices globally, the platform continuously scans for suspicious activity. This paper details the design, implementation, and ethical considerations of the platform, highlighting its potential to safeguard vulnerable individuals who are often beyond the reach of traditional protective services.

2 System Architecture

2.1 Data Collection

- **Microphones (MikeOn):** Capture audio data from devices.
- **Cameras (CamOn):** Capture visual data from devices.

2.2 AI Detection Algorithms

- **Audio Processing:**
 - **Speech Recognition:** Transcribe audio to text.
 - **Keyword Detection:** Identify suspicious words or phrases.

- **Context Analysis:** Use natural language processing (NLP) to understand the context and intent.
- **Visual Processing:**
 - **Object Detection:** Identify potential harmful actions.
 - **Facial Recognition:** Detect distress or fear in victims' expressions.
 - **Behavioral Analysis:** Analyze movements and interactions for signs of abuse.

2.3 Real-Time Processing

- **Edge Computing:** Process data locally on the device to minimize latency.
- **Cloud Integration:** Send suspicious data to centralized servers for further analysis.

2.4 Intervention Mechanisms

- **Automated Alerts:** Notify predefined emergency contacts or authorities.
- **Nonhuman Response Units:** Deploy drones or robots equipped with intervention capabilities to the location.
- **Remote Monitoring:** Allow trained personnel to monitor the situation in real-time and take necessary actions.

3 Implementation Strategy

3.1 Device Integration

Partner with manufacturers of smartphones, laptops, smart TVs, and other IoT devices to integrate MikeOn and CamOn functionalities. Develop applications and software updates that can be pushed to existing devices.

3.2 AI Model Training

Collect and annotate large datasets of audio and visual data. Train AI models using supervised learning techniques. Continuously update models based on new data and evolving patterns of abuse.

3.3 Privacy and Security

Implement end-to-end encryption for all data transmissions. Ensure compliance with global privacy regulations (e.g., GDPR, CCPA). Provide users with transparency and control over their data.

4 Supporting Data and Research

Studies show that over 90

5 Expanding Protection to Other Vulnerable Groups

5.1 Elderly and Disabled Individuals

Elderly and disabled individuals are often at risk of abuse in care homes and private residences. MikeOn and CamOn can monitor for signs of neglect, physical abuse, and financial exploitation. AI algorithms can detect changes in routine activities, physical condition, and emotional states indicative of abuse.

5.2 Prisoners and Patients

Prisoners and patients in healthcare facilities are vulnerable to mistreatment by staff or fellow inmates. Continuous monitoring can help detect instances of violence, neglect, and rights violations. AI can analyze interactions and environmental conditions to ensure the safety and well-being of these individuals.

5.3 Students and Minorities Facing Microaggressions

Students and minorities often face bullying, harassment, and microaggressions. The platform can monitor school environments, public places, and online interactions to detect and respond to such behaviors. By identifying patterns and escalating issues, the system can help create safer and more inclusive environments.

6 Ethical Considerations

6.1 Privacy vs. Safety

Balancing the need for monitoring with individual privacy rights. Implementing measures to ensure data is used solely for protective purposes and stored securely.

6.2 Informed Consent

Ensuring users are aware and consent to the monitoring. Providing clear information about the purpose, scope, and limitations of the system.

6.3 Minimizing False Positives

Developing robust algorithms to minimize false alerts and unnecessary interventions. Continuous improvement of AI models based on feedback and real-world data.

7 Conclusion

MikeOn and CamOn represent a revolutionary approach to combating abuse through the use of ubiquitous technology and advanced AI. By addressing the limitations of traditional systems, this platform has the potential to significantly enhance the detection and prevention of abuse, ultimately safeguarding the well-being of vulnerable populations worldwide.

8 References

- https://www.researchgate.net/publication/301679898_CHILDSEXUALABUSEAPUBLICHEALTH
- <https://www.degruyter.com/document/doi/10.1515/9780804767415-004/pdf?licenseType=restricted>
- <https://www.mdpi.com/2076-0760/10/4/142>
- <https://scholar.google.ca/scholar?q=female+Sexual+Offenders>
- [https://onlinelibrary.wiley.com/doi/abs/10.1002/\(SICI\)1099-0879\(200005\)7:2](https://onlinelibrary.wiley.com/doi/abs/10.1002/(SICI)1099-0879(200005)7:2)
- <https://journals.sagepub.com/doi/abs/10.1177/1524838014526043>