SaqrFire AI

AI-Powered Fire Safety System for UAE

Fire Department

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Key Features

1. AI Assistants for Enhanced Emergency Response

- ### Voice-Guided Assistance

Our platform will deploy AI-powered voice assistants in Arabic and multiple languages across smartphones, kiosks, and AR glasses. This will provide immediate, accessible emergency guidance in critical situations.

- ### Hands-Free Emergency Calls

Utilizing speech recognition and NLP, the AI assistants will help citizens initiate emergency calls hands-free, allowing them to focus on escape or other critical actions.

2. Augmented Reality Evacuation Guidance

1 We will develop an AR-based fire evacuation app for mobile phones and smart glasses, providing dynamic escape routes based on real-time data.

2 Utilizing GPS and sensor data, the AR app will overlay escape routes onto floors and walls, guiding people to safety.

3 The system will dynamically adjust evacuation routes based on fire spread, smoke levels, and blocked exits, ensuring the most effective path to safety.

3. IoT-Connected Smart Fire Sensors

IoT-enabled smoke, fire, and heat sensors will be installed in commercial and residential buildings, providing real-time fire detection data.

These sensors will connect to a centralized AI-driven fire command center, allowing for immediate analysis and action.

AI algorithms will predict fire spread patterns and automatically adjust evacuation strategies, maximizing safety and response efficiency.

Next Steps: Implementation Strategy

1

Pilot Program

We propose a pilot program in a select area of Dubai, testing the system's effectiveness and gathering valuable data.

2

Public Awareness Campaigns

Extensive public awareness campaigns will be launched to educate citizens on using the AI system and its benefits.

3

Collaboration with Key Stakeholders

Close collaboration with the UAE Fire Department, Civil Defense, and Dubai Smart City will be crucial for seamless integration and deployment.

What's New ?

1 — Our system adds **AI-driven voice guidance** that works via **smartphones, kiosks, and AR glasses** to provide **step-by-step evacuation support** in multiple languages, including Arabic dialects.

2 — Our **AR-powered evacuation system** will use **smartphone cameras and AR glasses** to project **dynamic evacuation routes** onto floors and walls in real time.

3 — Our IoT sensors will use **AI-driven predictive analytics** to **anticipate fire spread patterns**, allowing authorities to **adjust evacuation routes dynamically**.

4 — Our platform will **fully integrate with Dubai's Smart City AI system** to enable:
✓ **Real-time drone surveillance** of fire zones.
✓ **AI-enhanced emergency vehicle navigation** for faster response times.
✓ **Smartphone emergency notifications** with **inter guidance**.

Key Takeaways

1

Enhanced Response

AI-driven assistance will significantly enhance emergency response times and effectiveness.

2

Smart Evacuation

Augmented reality guidance will provide accurate and dynamic evacuation routes, improving safety.

3

Real-Time Data

IoT sensors will deliver real-time fire data, enabling proactive action and predictive analytics.

4

Smart City Integration

Seamless integration with existing smart city infrastructure will create a unified safety platform.