

# **Emergency Dispatch AI Assistant: Revolutionizing Emergency Response**

# Emergency Dispatch AI Assistant: Revolutionizing Emergency Response

- **Title:** Emergency Dispatch AI Assistant
- **Subtitle:** Leveraging Conversational AI to Transform Emergency Response Systems
- **Hackathon:** MiniMedi 2024 by MediHacks
- **Presented by:** Iqra Akhtar

# Problem Statement

- **The Challenge:**
  - Dispatchers often lack up-to-date training and protocols to handle life-threatening emergencies.
  - Existing guidebooks are outdated, and real-time decisions can be overwhelming.
  - High-stakes scenarios require precise, evidence-based recommendations to save lives.

# Our Solution

- **Emergency Dispatch AI Assistant:**
  - A conversational AI tool to assist dispatchers with real-time, evidence-based recommendations.
  - Capable of handling text and audio inputs to simulate or respond to emergencies.
  - Built to enhance decision-making in mission-critical situations.

# Key Features

## 1. Text-Based Emergency Scenarios

- Dispatchers input a scenario, and the AI provides actionable recommendations.

## 2. Audio Transcription and Analysis

- AI transcribes uploaded audio and generates life-saving advice.

## 3. Predefined Emergency Protocols

- Access a database of common scenarios (e.g., cardiac arrest, fire, choking) with best-practice responses.

## 4. User-Friendly Interface

- Simple web interface for ease of use in high-pressure situations.

# Technology Stack

- **Backend:** Flask Framework
- **AI Models:**
  - **CHATGPT-4O-LATEST:** For conversational analysis and recommendations.
  - **WHISPER-LARGE-V3:** For real-time audio transcription.
- **API Configuration:** Custom OpenAI Base URL
- **Frontend:** HTML, CSS, and JavaScript for the interface.
- **Knowledge Base:** Predefined emergency protocols for quick responses.

# Challenges and Future Plans

- **Current Challenges:**
  - Ensuring AI's advice aligns with local emergency protocols.
  - Building trust in AI systems for high-stakes scenarios.
- **Future Developments:**
  - Integration with live dispatch systems.
  - Adding multilingual support for global use.
  - Expanding the protocol database to include more scenarios.



# THANK YOU