

**PRESENTS** 

## Agentic AJ Day

Build the next generation of intelligent agents



#### **Team Details**

- a. **Team name:** Neuro5
- b. Team leader name: Rohit Sandip Ratnaparkhi
- c. Problem statement: Improving Safety at Large Public Events



#### **Real-Time Crowd Monitoring**

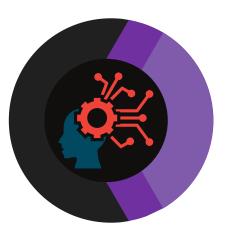
- Drone & CCTV feeds
- Crowd density tracking
- Movement flow detection





#### **Predict Bottlenecks Early**

- Early warning alerts (10–15 mins)
- Velocity & direction analysis
- Uses Vertex AI Forecasting



## BRIEF ABOUT THE IDEA



#### **Smart Resource Dispatch**

- GPS-based team tracking
- Fastest Google Maps route
- Auto alert response





#### **Built with Google Al**

- Gemini for smart insights
- Google Maps for routing
- Firebase Studio for UI

#### **Advanced Safety Features**

- Al Lost & Found system
- Crowd Sentiment analysis
- Auto drone dispatch

#### **Anomaly Detection Engine**

- Detects fire/smoke
- Spots **Suspicious** Activities
- Instant critical alerts



#### **Opportunities**

#### **How Drishti is Different**

#### **Prediction, Not Just Detection**



Drishti uses AI to predict crowd jams 15–20 minutes before they happen.

#### **Automatic Incident Response**



Sends help instantly when an issue is detected no need to wait for manual decisions.

#### Al-powered Lost & Found



Uses photos and live videos to find lost people or items in the crowd.

#### **How It Solves the Problem**

#### **Manages Crowd Flow**



Shows safer routes to guide people away from danger and prevent panic.

#### **Fast Emergency Response**



Finds the nearest team and guides them using live google maps.

#### **Improves Team Coordination**



Keeps control room and field teams in sync with real-time updates.

#### What Makes It Special (USP)

#### Powered by Google Al



Uses smart AI from Vertex, Gemini, and Google for better performance.

#### **Firebase Studio Live Dashboard**



Has a real-time control panel showing alerts, team movement, and video.

#### **Modular and Extensible**



Each component can be customized or extended for different event types



#### **Features of the Solution**

1

#### **Bottleneck Prediction**

U-Net++ + Vertex AI predicts crowd jams 15–20 mins early from live feeds.

2

#### **Smart Incident Response**

Detects incidents, dispatches nearest responder via GPS and Maps API.

Drishti's Core
Powers

**2** Croud Count Heatmaps

Generates real-time crowd heatmaps using multiscale DCNNs to visualize crowd density and flow.

4

#### **Anomaly Detection**

Detects fire, smoke, and abnormal crowd behavior using real-time video analysis powered by Gemini.

5

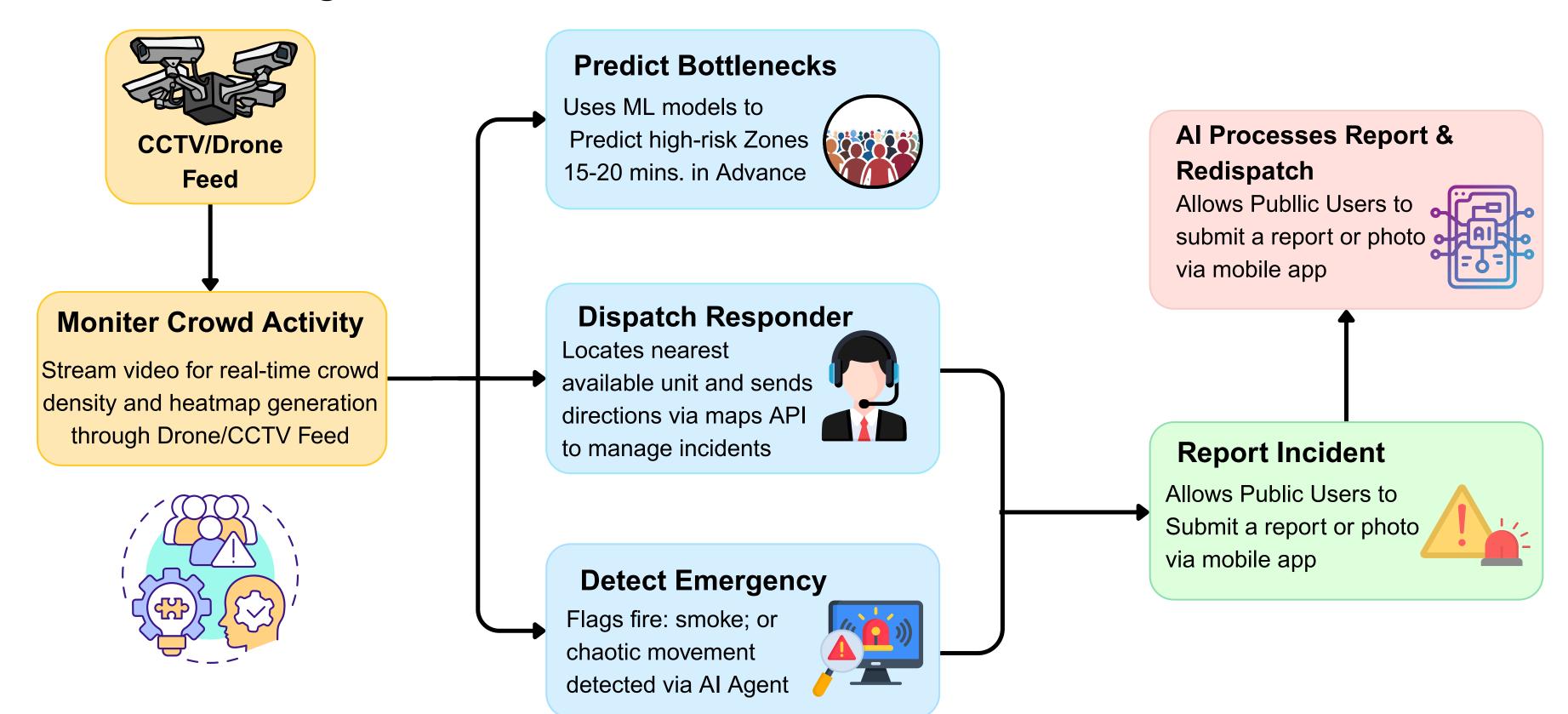
#### **Lost Person Detection**

Face-matching with CNNs + Vertex Vision locates missing persons.





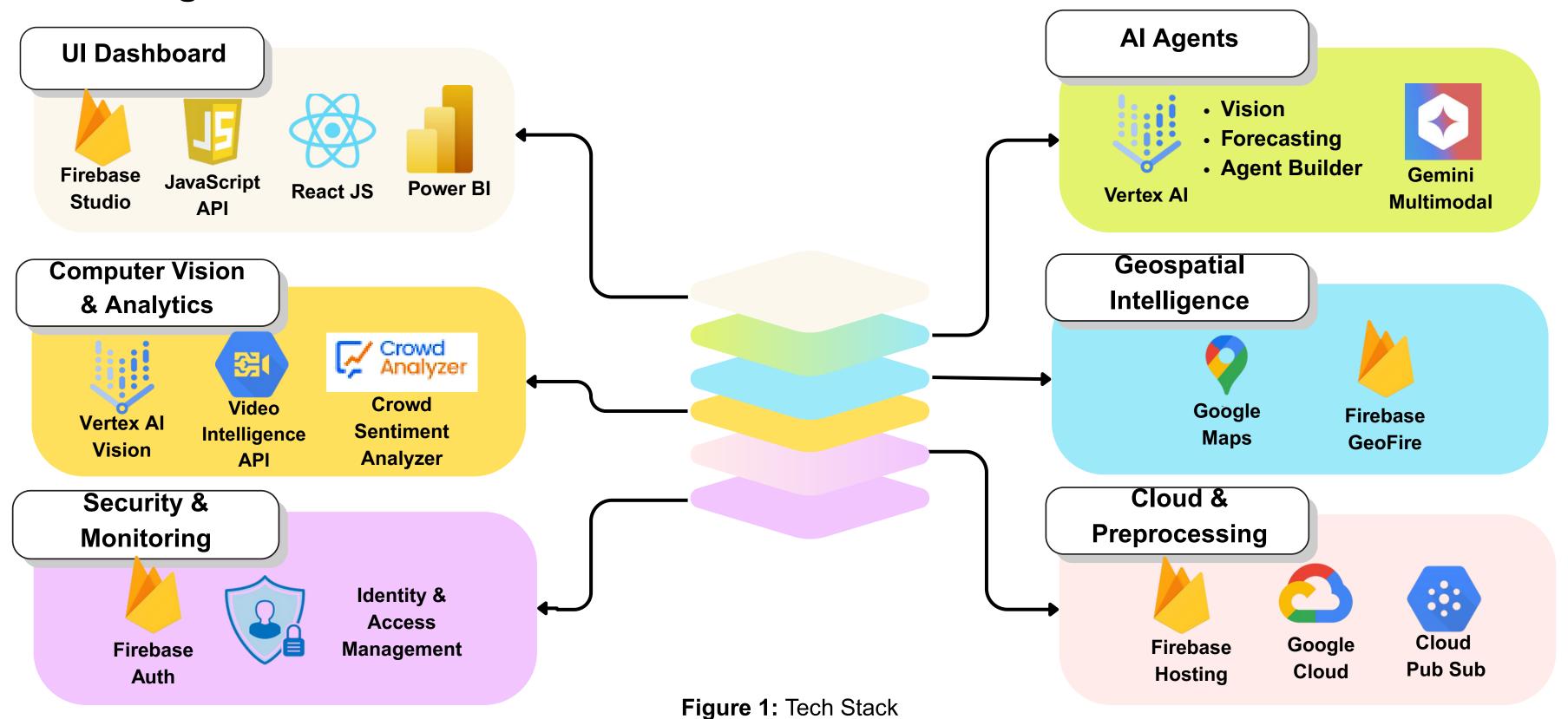
#### **Process Flow Diagram**







#### Technologies to be used in the solution



#### Powered by

#### Architecture diagram of the proposed solution

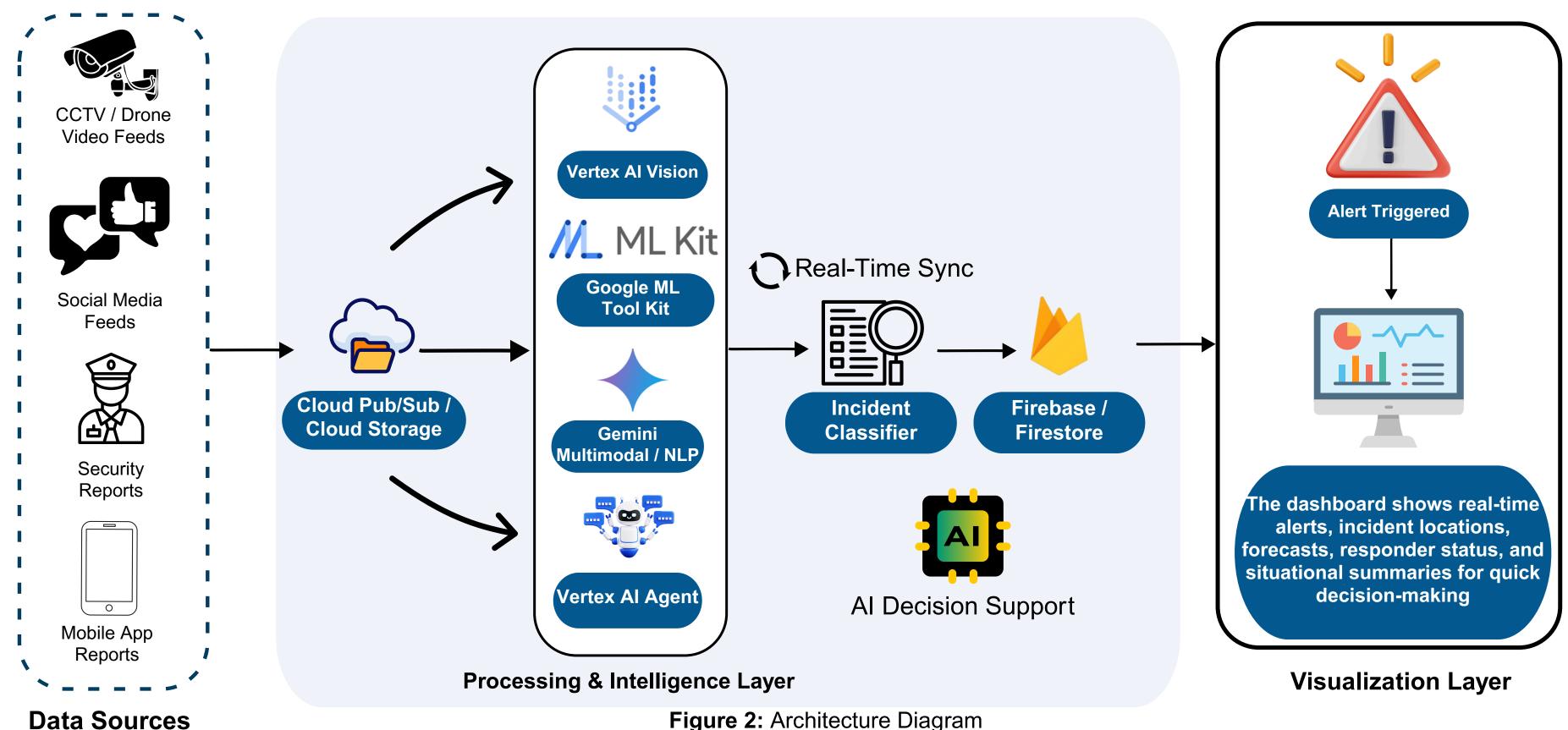
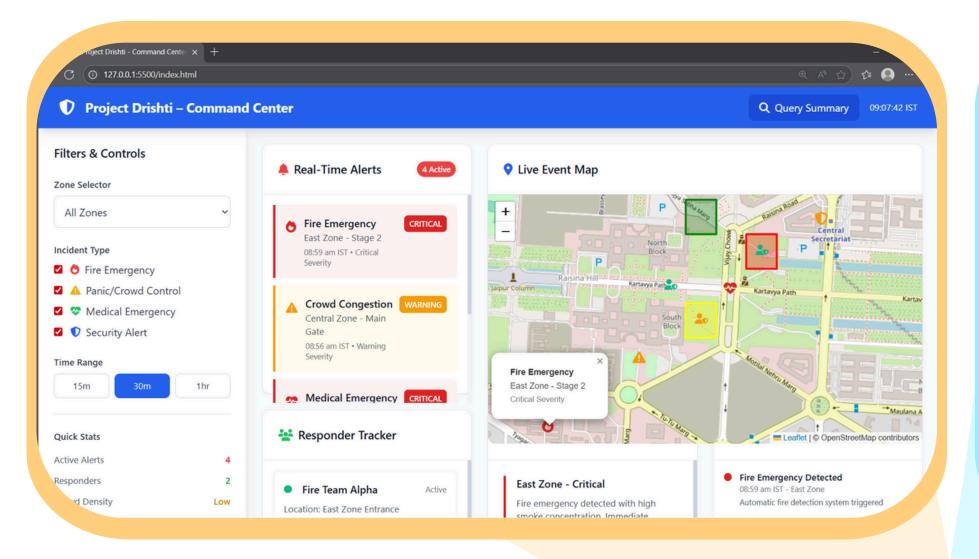
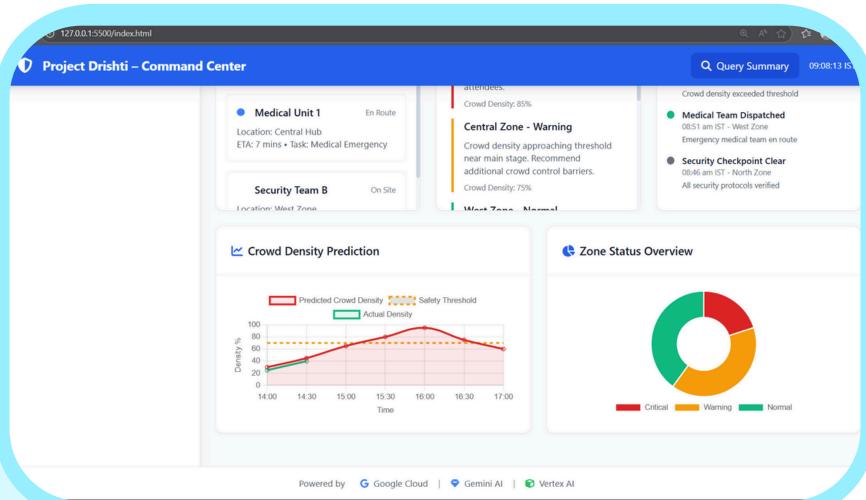


Figure 2: Architecture Diagram

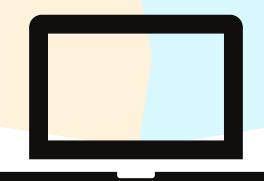


#### Mock diagrams of the proposed solution:





- Interactive live event map
- Active alerts: fire, medical, crowd
- Real-time incident locations
- Quick situational overview



- Live responder status + ETA
- **Emergency** Type Proportion
- Zone Coverage Monitor
- Crowd Density Trend Graph

Figure 3: Dashboard View



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### Thank you!