

SMART ROUTE MANEUVERING SYSTEM



A LIFE SAVING INITIATIVE

By
TRAILBLAZERS



About Trailblazers

We are Trailblazers, a dedicated team participating in the Smart India Hackathon. Our mission is to enhance road safety and streamline emergency response through our innovative solution, SMART ROUTE MANEUVERING SYSTEM.

OUR TEAM

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ADDRESSING THE ISSUE!...



- In urban areas, traffic congestion can severely delay emergency services, costing valuable time and lives.
- Emergency vehicles often get stuck in traffic jams due to lack of emergency lanes, even with sirens and lights, leading to increased response times..
- Lives are tragically lost when emergency services are delayed in traffic jams, as every second counts during critical situations.



The Issue

Car catches fire on busy road, traffic jam delays firemen

TNN / Apr 23, 2019, 10:29 IST



Eyewitnesses say fire could have been put out and the car saved had the fire brigade arrived on time

Jharkhand govt seeks explanation from agency over deaths due to ambulance delay

By Debashish Sarkar X , Jamshedpur

Oct 15, 2023 09:49 PM IST



"We have sought an explanation from EMRI-GHS regarding the inordinate delays and, in some cases, the non-arrival of ambulances. They have been instructed to

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CHANDIGARH: A car, driven by a senior citizen, was burnt to a crisp at Sector 7-8 roundabout on Monday afternoon. The driver and the passenger managed to save their lives by jumping out of the car. According to eyewitnesses, fire engines did not reach the spot on time to save the car, as they got stuck in a traffic jam.

According to fire department officials, they received a phone call at around 1.15pm about a fire in the car.

6 ambulances stuck in jam, traffic clogged for 3 hours

TNN / Updated: Oct 31, 2023, 11:08 IST

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A major traffic jam occurred in Bhopal's Old City due to nomination rallies, causing vehicles, including ambulances, to be stuck for hours. The traffic arrangements made by the police were ineffective, leading to chaos. Passers-by had to step in to regulate the traffic. In another incident, police have filed a charg ... [Read More](#)



Bengaluru sees 67% spike in accident victims dying en route to hospital

In 2021, 175 accident victims died while being transported to the hospital for emergency treatment. This number rose by nearly 67% to 292 victims in 2023, according to data from the Bengaluru Traffic Police.

1 Child Dead, The Other Critical: Mumbai Family's 4-Hour Ordeal As Ambulance Gets Stuck In Traffic

Heavy traffic on Mumbai-Ahmedabad Highway kept an ambulance carrying a three-day-old premature baby, waiting for at least four hours. Following that, the parents, struck with the panic, went down the road to make way for the vehicle so the baby could get the treatment. The family was advised to take the infant to Wadia Hospital after the twin died.

WHAT WE ARE OFFERING...



Our system provides:

- Real-time GPS tracking of emergency vehicles
- Dynamic traffic signal control to prioritize emergency vehicles
- Alerts to regular drivers via mobile apps or digital boards
- A reduction in response time, potentially saving lives



TECHNICAL IMPLEMENTATION

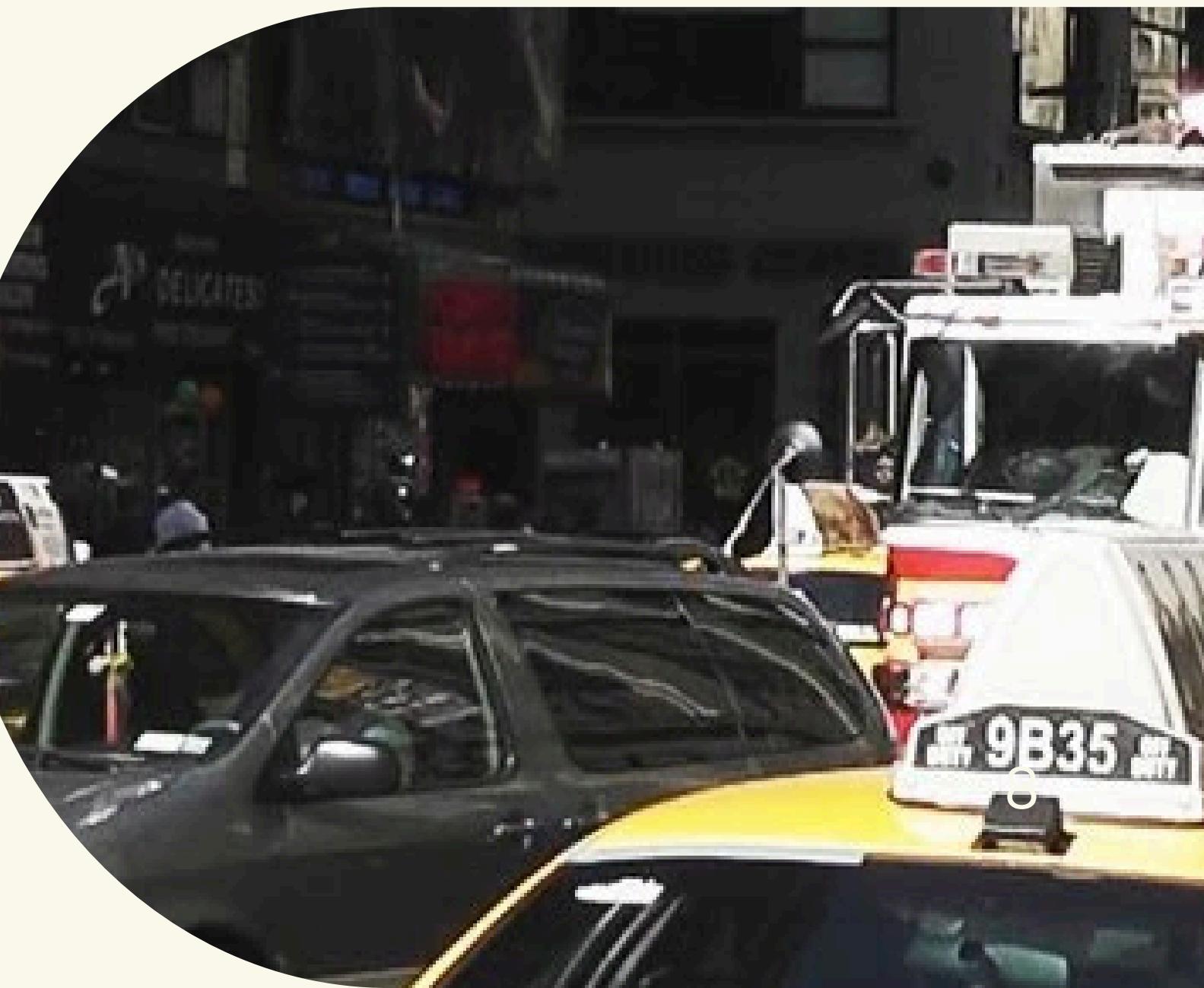


FRONTEND:

- Driver notification system with alerts.
- Cloud services for scalability and fast data processing.
- login and registration preface for emergency departments to feed the data regarding the respective vehicles.

BACKEND:

- Real-time GPS data processing.
- Traffic Signal Control: Automatic signal prioritization.



Conclusion

Implementing an Emergency Service Route Rationalization System is vital to improving response times and saving lives during critical emergencies. By optimizing traffic flow and prioritizing emergency vehicles, such a system can minimize delays caused by congestion, ensuring that help arrives when it's needed most. This technological advancement not only enhances public safety but also reduces the risk of preventable deaths and damage. Ultimately, an efficient and well-planned system can transform urban mobility, making cities safer and more resilient in times of crisis.

RESEARCH AND REFERENCES

Details / Links of the reference and research work:-

- <https://www.deccanherald.com/india/karnataka/bengaluru/city-sees-spike-in-accident-victims-dying-en-route-to-hospital-2998128>
- <https://www.hindustantimes.com/cities/ranchi-news/jharkhand-govt-seeks-explanation-from-agency-over-deaths-due-to-ambulance-delay-101697386785120.html>
- <https://timesofindia.indiatimes.com/city/bhopal/6-ambulances-stuck-in-jam-trafic-clogged-for-3-hours/articleshow/104839760.cms>
- <https://timesofindia.indiatimes.com/city/chandigarh/car-catches-fire-on-busy-road-traffic-jam-delays-firemen/articleshow/69002039.cms>
- <https://www.timesnownews.com/mumbai/1-child-dead-the-other-critical-mumbai-familys-4-hour-ordeal-as-ambulance-gets-stuck-in-traffic-article-108130697>

Thank You



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