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Patent Search

Invention Title	Navi-Guard: A Zone-Based Transportation Safety System Using AI-Driven Predictive Analytics and Real-Time Emergency Response Integ
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Abstract:

Abstract Navi-Guard is a real-time safety platform designed to reduce accidents and enhance the performance of autonomous vehicles. Using a simple three-zone system (high-risk), Orange (moderate-risk), and Green (safe), it sends users alerts based on their location to help them avoid dangerous areas. The system gathers data from and accident histories, turning it into valuable insights that improve driver safety and support autonomous vehicle training, enhancing autopilot systems for safer navigation which can be utilised for monetization. Navi-Guard also integrates with emergency services to provide real-time incident details, ensuring faster medical assistance with predictive analytics, it warns users about potential risks before entering hazardous zones. Additionally, the platform anonymizes and collects safety data, which to help improve autonomous vehicle technology. By combining real-time alerts, predictive warnings, and data-driven insights, Navi-Guard offers a complete solution for transportation safety, benefiting both drivers and autonomous vehicles.

Complete Specification

Description: PREAMBLE TO THE DESCRIPTION:

The following specification particularly describes the invention and how it is to be performed:

Principal Elements:

- Zone-based risk classification system (Red, Orange, Green)
- Real-time safety mapping and analytics engine
- Emergency response integration module
- AI-powered predictive analysis system
- Data collection and processing infrastructure

Priorities for Design:

- Real-time hazard detection and alert generation
- Minimal latency in emergency response
- Continuous data collection and analysis
- High reliability and accuracy
- Weather-resistant operation

Novel Features Include:

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