

## M.KUMARASAMY COLLEGE OF ENGINEERING

### Department of Electronics and Communication Engineering

# Enhanced Security Framework for Gray-Hole Attack Prevention in Vehicular Networks

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**BATCH NO : 22**

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### INTRODUCTION

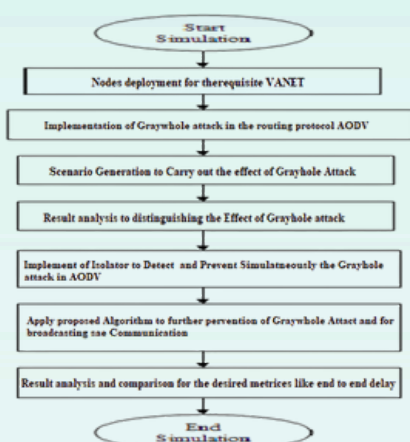
- VANETs enable vehicle communication to enhance road safety.
- This makes them prone to Gray-Hole attacks.
- Gray-Hole nodes selectively drop or alter packets.
- Detecting them is key to secure communication.



### OBJECTIVE

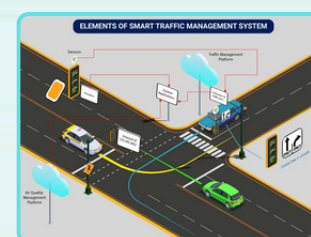
- Develop a robust system to detect and prevent Gray-Hole attacks in VANETs.
- Address selective packet dropping and data manipulation threats effectively.
- Enhance VANET security using smart anomaly detection techniques.
- Implement dynamic trust management to strengthen network reliability.
- Ensure real-time identification and isolation of malicious nodes.

### FLOW CHART

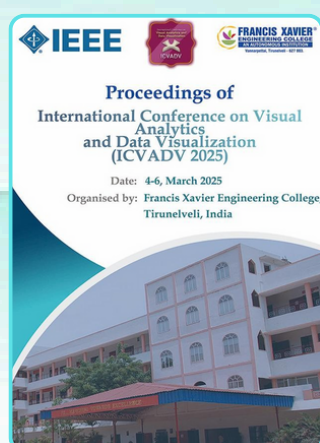


### APPLICATION

- Improves traffic safety and prevents accidents.
- Integrates securely with smart city transport systems.
- Provides accurate routes for emergency vehicles.
- Delivers real-time traffic data without loss. Secures communication in self-driving cars



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### RESULT

