**Assimilation of Preemptive Model on Accident Locations on Indian Roads**

*G Sai Krishnan*

*Associate Professor*

*Department of mechanical engineering*

*Rajalakshmi Institute of Technology*

*Chennai, India*

[*saikrishnan.g@ritchennai.edu.in*](mailto:saikrishnan.g@ritchennai.edu.in)

*Dr A.Arthi*

*Head of Department*

*Department of Artificial Intelligence and Data Science*

*Rajalakshmi Institute Of Technology*

*Chennai, India*

[*arthi.a@ritchennai.edu.in*](mailto:arthi.a@ritchennai.edu.in)

*O Pandithurai*

*Associate Professor*

*Department of Computer Science and Engineering,*

*Rajalakshmi Institute of Technology,*

*Chennai, India*

[*pandics@ritchennai.edu.in*](mailto:pandics@ritchennai.edu.in)

*Mohammed Naveed Shariff R*

*Artificial Intelligence and*

*Data Science*

*Rajalakshmi Institute of Technology*

*Chennai, India*

[*mohammednaveedshariff.2021.ad@ritchennai.edu.in*](mailto:mohammednaveedshariff.2021.ad@ritchennai.edu.in)

[*https://orcid.org/0009-0008-5288-6911*](https://orcid.org/0009-0008-5288-6911)

*S Vivek*

*Assistant*

*Professor*

*Department of Mechanical Engineering,*

*Rajalakshmi Institute of Technology,*

*Chennai, India* [*vivek.s@ritchennai.edu.in*](mailto:vivek.s@ritchennai.edu.in)

*Nachiar S*

*Artificial Intelligence and*

*Data Science*

*Rajalakshmi Institute of Technology*

*Chennai, India* [*nachiar.s.2021.ad@ritchennai.edu.in*](mailto:nachiar.s.2021.ad@ritchennai.edu.in)

[*https://orcid.org/0009-0006-3530-791X*](https://orcid.org/0009-0006-3530-791X)

***Abstract*—*In this paper, we have solved the Spatial Heterogeneity by the preemptive model using the ORS’s API. Black Spot locations are gathered and then visualized in the Indian States, It concludes 92% of accidents are caught on Black Spots in Maharashtra in 2018. According to the research made on “Education Influence on Traffic Safety '' in Vietnam. It stated that the preemptive approach before accidental situations may reduce 70% of accidents. So we use a Precaution model to indicate the Black Spot zones to the driver. This is how we can drag down 70% of accidents in Black Spots.***

***Keywords—Black Spots, Road Accidents, Precaution model, Traffic Safety Education.***