

Fully Informed Vulnerable Road Users

Simpler, Maybe Better

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ABSTRACT

Vulnerable Road Users (VRUs) are all those with an increased vulnerability on the road, in particular non-motorised ones. Until now, the emphasis has been in politics more focused on drivers, vehicles and infrastructures. However, recent developments show a shift in other directions, with researchers now devoting efforts to improve VRUs' safety. Hence, this work focuses on pedestrian walking and crossing behaviour, attitudes, motivations and habits, being grounded on an approach to Knowledge Representation and Reasoning centred on logic programming, which establishes a formal logical inference engine that is complemented with an Artificial Neural Network line to computation.

CCS CONCEPTS

• Computing methodologies~Knowledge representation and reasoning • Theory of computation~Programming logic

KEYWORDS

Vulnerable Road Users, Knowledge Representation and Reasoning, Logic Programming, Artificial Neural Networks.

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