# Time-Change-Fuzzy-based Intelligent Vehicle Control System for Safe Emergency Lane Transition During Driver Lethargic State

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Driver's physical condition may contribute to traffic accident when it is in a lethargic state that result in faulty maneuvers of his vehicles. Due to these possibilities, many research focuses in developing automatic speed control systems that considers the environment condition, with which relieving the human from the control task when the driver's judgement is not suitable for the environmental condition. Time-change-fuzzy-sets has been proven successful in analyzing safety level in traffic condition. This paper proposes an intelligent vehicle control system based on Time-Change-Fuzzy that can safely transit a moving vehicle from its original lane towards the emergency lane automatically when the driver is in lethargic state and the effectiveness was evaluated in a series of simulation.

**Keywords:** Computational Intelligence, Fuzzy, Intelligent Control, Autonomous Vehicle.