

Evolutionary Computation on Road Safety

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Abstract. This study examines the psychological research that focuses on road safety in *Smart Cities* as proposed by the *Vulnerable Road Users* (*VRUs*) sphere. It takes into account qualities such as VRUs' personal information, their habits, environmental measurements and things data. With the goal of seeing *VRUs* as active and proactive actors with differentiated feelings and behaviours, we are committed to integrating the social factors that characterize each *VRU* into our social machinery. As a result, we will focus on the development of a *VRU Social Machine* to assess *VRUs'* behaviour in order to improve road safety. The formal background will be to use Logic Programming to define its architecture based on a *Deep Learning* approach to *Knowledge Representation* and *Reasoning*, complemented with an *Evolutionary* approach to *Computing*.

Keywords: Artificial Intelligence · Smart Cities · Vulnerable Road Users Internet of People · Knowledge Representation and Reasoning Evolutionary Computation