

# **Assessing Pedestrians' Perceptions and Willingness to Interact with Autonomous Vehicles**

## **Abstract**

Our overall purpose will be to measure a pedestrians' willingness to cross an intersection when an autonomous vehicle is simultaneously waiting to proceed. Recently, the automobile industry has experienced an explosion of efforts to enhance autonomous vehicle capabilities and set an eventual goal to remove human operators when viable. However, this new goal has created a gap in the research assessing the relationship between autonomous vehicles and their interaction with pedestrians. It is important to realize that routine interactions between pedestrians and automobiles will change dramatically. The pedestrian crossing the street can no longer receive a visual or auditory cue from the driver signaling a recognition of their presence and intentions to cross. Therefore, it is important to recognize the need for enhanced safety features encompassing a unique interaction. First and foremost, these features should be designed to enhance safety for both the pedestrian and any passengers traveling inside of the autonomous vehicle. Furthermore, they should augment consumers' and shareholders' confidence towards investing in these products.

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