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Evaluating iNAGO's Car Information Assistant to Improve User Experience and Driver Knowledge and Safety

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iNAGO

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Research and development of autonomous vehicles and advanced driver assistance systems (ADAS) has steadily increased over the last decade and will continue to grow in the coming years. Advances in driving technology are intended to increase driver safety, however, recent research suggests that drivers with limited knowledge of these systems such as Adaptive Cruise Control may actually demonstrate increased negative driving behaviors such as distracted driving and speeding. To address the growing concern about driver safety with new advanced and sometimes autonomous features being developed and implemented in vehicles, iNAGO, a software company in Toronto is developing a Car Information Assistant (CI), which is designed to provide information about vehicle features and ADAS functionalities to the driver. Through visual-vocal interaction, CI is intended to act as an in-vehicle personal assistant. This study was designed to test the CI and assess its ability to provide users information about their vehicle and improve their feeling of safety. Each participant (N=20) interacted with the CI and were able to ask it any question they wanted for 20 different vehicle features. After each feature, the participant completed a survey with questions about the effectiveness of CI and how safe they would feel with CI in their vehicle. It was found that 90% of users said they would feel more knowledgeable about the features in their vehicle after using CI, 70% said they would feel safer with this application included in their vehicle, and 90% would use this application compared to a written car manual.