*Traffic Warning Sign Recognition &*

*Automatic Transmission Controller Integration*

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*Abstract*—This electronic document outlines the implementation of a Traffic Warning Sign Recognition (TWSR) system that outputs an appropriate transmission response if a stop sign is detected, through the usage of an Automatic Transmission Controller (ATC) system. This is a theoretical Advanced Driver Assistance System (ADAS) modelled in Simulink to show how Traffic Warning Sign Recognition may be used in a real-world setting in conjunction with other ADAS features.

Keywords—detection, integration, MATLAB, recognition, Simulink, traffic sign, transmission

# Introduction

TWSR systems are starting to become standard in the automotive industry, with many different implementations to produce the ADAS feature. One aspect of TWSR that is not researched thoroughly is its further application and how it can be used with other ADAS features. This project is an integration exercise of a TWSR and an ATC system in Simulink, where if a stop sign is detected, an appropriate transmission response to stop the vehicle will be sent. To simulate the driving experience, a video input will be fed into the TSR system and the output of the ATC will be visualised in a graph.

# Traffic Warning Sign Recognition

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# Automatic Transmission Controller

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# Integration between TWSR and ATC

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# Simulink Model

The preferred spelling of the word “acknowledgment” in America is without an “e” after the “g”. Avoid the stilted expression “one of us (R. B. G.) thanks ...”. Instead, try “R. B. G. thanks...”. Put sponsor acknowledgments in the unnumbered footnote on the first page.

# Benchmark Testing

The preferred spelling of the word “acknowledgment” in America is without an “e” after the “g”. Avoid the stilted expression “one of us (R. B. G.) thanks ...”. Instead, try “R. B. G. thanks...”. Put sponsor acknowledgments in the unnumbered footnote on the first page.

# Conclusion

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