

# FACULTY OF ELECTRICAL ENGINEERING UNIVERSITI TEKNOLOGI MARA TERENGGANU

## FINAL REPORT OF DIPLOMA PROJECT

## SMART CAR NAVIGATION SYSTEM BASED ON A.R.M TECHNOLOGY

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"I declare that this report entitled Smart Car Navigation System Based on ARM Technology is the result of my own group research except as cited in the references. The report has not been accepted for any degree and is not concurrently submitted in candidature of any other degree."

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### ABSTRACT

Most of modern vehicle are using manual control system that need human to sense, control steering, clutch and throttle. Thus, human errors might cause accident especially when the car loss of control. Therefore, this project is carried out to develop a smart car model that will navigate automatically on specific path. A CMOS camera is used to detect a black lane on the custom track. The route information is sent to ARM processor and the steering angle of the car is determined. As a result, the car manage to steer automatically in various route condition such as straight line, ramp, intersection line and also sharp turn.

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