

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

∞ قُلْ سِيرُوا فِي الْأَرْضِ فَانظُرُوا كَيْفَ بَدَأَ
الْخَلْقَ ثُمَّ اللَّهُ يُنشِئُ النَّشْأَةَ الْآخِرَةَ إِنَّ اللَّهَ عَلَى
كُلِّ شَيْءٍ قَدِيرٌ

صدق الله العظيم

[العنكبوت: 20]

Dedication

When dreams come true
A lot of people behind that
Father and mother
Also brothers and friends

All of them brave & honest
Dr. abd alrsoul gabar
I thank them all
Let us be for ever...

Acknowledgement

Thank full for our great Allah how give us a right direction and watching all the time. and also I thank those people behind any success I get, my great teachers my nice family and fantastic friends for motivate me to enhance my skill and push me to ultimate.

Dr. abd alrasoul gabar is give me a chance to be here with un limit support and advice. I thank hem so much for that.

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ABSTRACT

The idea of this project depends on using Atmega32 microcontroller to direct a standard model of auto (car) by translate incoming signals from sensors around the model. So when the model restricted by any objection microcontroller detect that and send to motor on the model to reverse wheel direction and turn angular to avoid the obstacle.

To reach these target C language is used to program the microcontroller according to desired flow chart, and for the model a four wheel (car) is used with two motors and set of gears for direct motion and rotation and the H Bridge L293D is selected to drive motors.

تجريد

تعتمد فكرة هذا المشروع إستخدام المتحكمه **Atmega32** وذلك لتوجيه نموذج (سيارة) قياسية من خلال ترجمة الإشارات الواردة من المجسات المثبتة علي الأطراف، وبالتالي عندما يصطدم النموذج بأي عائق يتم اكتشاف ذلك بواسطة المتحكمه والتي بدورها ترسل إشارات إلي الموتورات المثبتة في النموذج لعكس الحركة والدوران لتفادي العائق.

للاوصول إلي هذا الهدف تم برمجة دائرة المتحكمه بلغة **C** وفقا لمخطط الحركة المنظورة كما تم تعديل نموذج سيارة مكونة من أربعة إطارات و موتورين وتروس ناقلة للحركة وعزم الدوران واختيار السواقه **L293** لهذا الغرض.

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