The Grandmaster

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1 Introduction

The Grandmaster is a chess playing robot with its own artificial intelligence. It recognizes the opponent's (human) move and accordingly plays its own. This project tends to bring together computation along with the feeling of playing a real world chess game.

2 Assumed components and approximate prices

1. Learn CAD software and create a model of the robot (0.5 weeks)

2. Build the skeleton of the robot (1 week)

3. Build the electrical part of the robot complete with circuits and motors (1.5 weeks)

4. Learn about the Chess AI and microcontroller code (1 week)

5. Code the chess AI and sync it with the microcontroller code (1 week)

6. Save time for testing and debugging (1 week)

3 Assumed components and approximate prices

1. Microcontroller (Arduino) 1000/-

2. Motors 1500/-

3. Skeleton and miscellaneous 2000/-

4 What we aim to learn from this project

1. CAD

2. Microcontroller coding

3. Learning how to handle databases

4. Basics of artificial intelligence

5. Basic mechanical jobs (drilling, cutting, shaping etc)

6. Time Management

7. Teamwork