. For future analysis development, this project also can use different controller such as fuzzy logic and PID and comparison between LQR, PID and Fuzzy Logic can be done to see which controller is better.

REFERENCES

- [1] http://en.wikipedia.org/wiki/Linear-quadratic_regulator
- [2] http://en.wikipedia.org/wiki/Microcontroller
- [3] http://www.electricmotors.machinedesign.com/guiEdits/Content/bdeee4a/bdeee4a_1.aspx
- [4] Electromechanical Systems, Electric Mechanics AND Applied Mechatronics, Sergey E. Lyshevski.
- [5] Modern Control Engineering, Fourth Edition, Katsihiko Ogata.
- [6] Control Systems Engineering, Fourth Edition, Norman S. Nise.
- [7] Microcontroller Technology, The 68HC11 and 68HC12