ABSTRACT

Rotary Inverted Pendulum is an example of application in the field of control. Rotary inverted pendulum control aims to keep the pendulum in a balance position. The implementation of rotary inverted pendulums is commonly applied to the world of aerospace, rocket launches, ship cabins and robotics.

Rotary Inverted Pendulum is an unstable system. Therefore, a good controller is needed so that the system can work as expected, which is to remain in a balance position.

In this final project the author focuses on finding PID parameters using the method of hand tuning or commonly called trial and error. In the test, the authors took three different PID parameters and added three different masses to the pendulum to know the response through the graph.

Keyword : *Rotary Inverted Pendulum, PID, hand tuning, trial and error*.