Abstract

The conventional PID (proportional-integral derivative) controller is widely applied to industrial automation and process control field because of its simple structure and robustness, but it does not work well for nonlinear system, time-delayed linear system and time varying system. Artificial Neural Network (ANN) can solve great variety of problems in areas of control systems, pattern recognition, image processing and medical diagnostic. A Neural Network is a powerful data-modeling tool that is able to capture and represent complex input/output relationships. This paper represents the advantage of using neural network for PID controller. PID controller for surge tank has been implemented in MATLAB.
Implementation of Neural Network for PID Controller

References


Index Terms

Computer Science

Artificial Intelligence
Keywords
Pid Controller  Artificial Neural Network.