

Neuron adaptive PID control for greenhouse environment

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20419910&lokasi=lokal>

Abstrak

In this article, a single neuron adaptive proportional, integral, and derivative (PID) control scheme is proposed for a greenhouse environment control problem by employing Hebb learning algorithm for tuning the parameters of the controller. The proposed scheme takes the advantage of the ability of neuron, such as adaptivity, self-organizing, and self-learning, and it is easily implemented and has been successfully applied to a greenhouse climate control problem. The result show that the proposed adaptive PID control scheme can provide better closed-loop performance compared with the conventional PID method.