NEW METHODS TO IMPROVE FUZZY LOGIC CONTROLLERS PERFORMANCE

BY

*L. MASTACAN

Abstract. In real time applications for fuzzy control, to avoid the computing of the complex algorithm of fuzzy rules inference, look-up decision tables are usually implemented. The paper presents a method to compute by interpolation control values from a look-up decision table. With a PI-like fuzzy logic controller in a new method design and the interpolation method the increment of the control value can be optimal adjusted to obtain the best control performance. The experimental results of a tank liquid level fuzzy control and of a DC motor speed fuzzy control are illustrative.