Abstract

The purpose of this paper is to compare the various defuzzification techniques for the application of an automatic washing machine control design to predict the error difference between different methods. An automatic washing machine with for domestic applications is considered. The input parameters are considered to be the amount of dirt and grease on clothes. Depending upon the amount of inputs the wash time is to be decided as the output by various defuzzification techniques. The problem is supported by MATLAB simulation to assess the various techniques.

References
Defuzzification in a Fuzzy Logic Controller: Automatic Washing Machine

- Zadeh LA. Fuzzy sets. Information and Control, 1965; 8:338?53
- Rajsekaran S, Vijaylakshmi Pai, Neural Networks, Fuzzy Logic, and Genetic Algorithms, PHI

Index Terms

Computer Science
Fuzzy Systems

Keywords

Fuzzy Logic Controller  Defuzzification Techniques  Fuzzy Rule Base  Matlab  Simulation