Generating Fuzzy Rules

From Data

PROJECT ID: WL2-04

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Main user interface of the software package

In this Final Year Project, we will use the fuzzy technology to design a reliable and user-friendly software package for datamining. In this project, the objective is to develop a software package for datamining based on the fuzzy system algorithms. Furthermore, fuzzy systems are declared to be knowledge-based and rule-based systems, which imply knowledge that can be represented in terms of rules for easy understanding by human beings. We collect any corresponding data and then a fuzzy system is applied to find a relation between the set of input data and the output data. Afterwards, the simulation results can contribute for prediction in the future.

Generating Fuzzy Rules From Data
START

LOAD DATA

SAVE AS .XLS

SAVE AS .TXT

ASSGN DATA SHEET

SELECT INPUTS, OUTPUT, RANGE OF TRAINING DATA AND NO. OF MEMBERSHIP FUNCTIONS

SELECT TYPE OF MEMBERSHIP FUNCTION

TRIANGULAR

GUASSIAN

GENERATING FUZZY RULES

TABLE LOOK-UP SCHEME

COMPLETE THE RULE SETS

FUZZY INFERENCE ENGINE: PRODUCT

RUN THE SYSTEM AND PLOT THE PREDICT DATA GRAPH.

ERROR MEASUREMENT AND ANALYSIS

GENERATING FUZZY RULES FROM DATA
Result & Analysis

Graph shows the prediction result with input number equals **one**

Graph shows the prediction result with input number equals **four**

Graph shows the prediction result with input number equals **six**

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