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"Aplicativo Computacional para Determinação de Funções de Pertinência"

Abstract

The main reason for the elaboration of this research was to offer an initial contribution to the problem of the determination of membership functions in the analysis of fuzzy variables. The main methodologies currently applied to this context are presented specially in those referred ones to the Inductive Reasoning, (known as Method of the Entropy) and the Angular Fuzzy Sets. In this latter methodology, besides the automation, this work approaches its application in the demands and loads of electric power energy, as an additional method of analysis, and finally the Method of the Inference for flat triangles is also covered. By the way, it is in the context of the methodologies that the desired application is developed and presented as one of the solutions of fast and trustworthy reply for values of minimum uncertainty for the first methodology, and values of relevancy for second and third. As a complement the application analyzes any data set previously available, being or not included in the above described methodologies, suggesting in a diagnose the methodology for which the data in the acquisition must be treated to determine its membership function.