IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue1, March 2023

Fuzzy Logic: Examining its Real-World Applications Through Literature

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Abstract: It's been claimed that mathematics is the art of all arts and the science of all sciences. Most mathematical ideas and procedures have applications in a variety of other disciplines, including engineering, robotics, physics, etc. Among them are terms like fuzzy logic. This expression is spreading beyond mathematics and appearing in other disciplines such as engineering, medicine, robotics, etc., as well as in households. This paper presents the idea of fuzzy logic and its applications in many domains. This study serves as an example of how fuzzy logic is used in the fields of political science, chemical science, medicine, agriculture, operations research, and environmental science. This paper illustrates the three main stages of the fuzzy logic technique: fuzzification, rule or inference, and defuzzification. The findings demonstrated that fuzzy logic is a more versatile approach than mathematical logic, with applications across a wide range of domains.

Keywords: Fuzzy Algorithms, Fuzzy Optimization.

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