Fuzzy logic

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The Fuzzy Logic was introduced in 1965, by Lotfi Zadeh, it is a mathematical tool for dealing with uncertainty. The fuzzy theory provides a mechanism for representing linguistic constructs such as "many," "low," "medium," "often," "few". In general, the fuzzy logic provides an inference structure that enables appropriate human reasoning capabilities. On the contrary, the traditional binary set theory describes crisp events, events that either do or do not occur. It uses probability theory to explain if an event will occur, measuring the chance with which a given event is expected to occur. The theory of fuzzy logic is based upon the notion of relative graded membership and so are the functions of mentation and cognitive processes. The utility of fuzzy sets lies in their ability to model uncertain or ambiguous data Fig(1).