

Approximated solutions for fuzzy polynomials

ABSTRACT

Polynomials plays a major role in various fields such as mathematics, statistics, engineering and social science. By using the properties of triangular membership functions, we apply the learning algorithm of fuzzy neural network to solve the fuzzy polynomial equation. The learning algorithm is including the fuzzy coefficient A_i where $i = 1, 2, 3$ and fuzzy output of A_0 . In this paper, we are interested in finding solutions for polynomial like $A_1x + A_2x^2 + A_3x^3 = A_0$ for $x \in R$ where A_0, A_1, A_2 and A_3 are fuzzy numbers.