Enhancing the Interpretability of Soil classification Data from a Neural Network System by using Fuzzy Approaches

Abstract:

The soil classification results that are available from a Neural Networks system have the probability of being numerical and vague. Analysis of this result to provide a human-interpretable output becomes mandatory. The current project deals with constructing a complete system that provides human understandable output. The system is divided into two broad categories. The initial phase deals with organizing the attributes, finding their associations and finding the final set of values that are incorporated with their corresponding weights. These properties are incorporated into the neural networks for finding the results. The second phase classifies these results and constructs fuzzy rules based on the inputs and outputs. All the rules are combined to form a fuzzy rule set that provides the user with suitable results.