Hamming and hausdorff distance measures for staff selection problem: A comparison

Abstract

Selecting the right person to a particular job needs a lot of considerations, especially in a growth company. To solve this problem, many organisations have created an ideal candidate that fulfils all requirements for a particular job. In this case, decision makers will make a comparison between a set of candidates with the ideal candidate. The distance measures are then used to compare whether the candidates are on the par with the ideal candidate. Hamming and Hausdorff distances are the two distance measures that popularly used to compare the set of candidates with the ideal candidate. In this study, researchers employ fuzzy set theory along with the Hamming and Hausdorff distances to solve staff selection problem. Based on numerical computations that have been carried out, final results showed that both methods produced almost the same results even at different exigency levels. The results also showed that both distance measures have its own advantageous and can be applied according to suitable condition.

Keywords

Fuzzy set theory; Hamming distance; Hausdorff distance; Malaysia; Staff selection problem