

**FUZZY ANALYTIC HIERARCHY PROCESS (FAHP) AND
FUZZY TECHNIQUE FOR ORDER OF PREFERENCE BY
SIMILARITY TO IDEAL SOLUTION (TOPSIS) IN SELECTING
THE BEST INFORMATION TECHNOLOGY (IT) PROGRAMS
BASED ON EMPLOYER PERSPECTIVE**

NURSHAFIQAH AINA BINTI SHAH BANI

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Universiti Teknologi Mara**

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ABSTRACT

For a company to succeed in the rapidly evolving sector of information technology (IT), choosing the best employees based on employer preference is important. The main goal in choosing employees in the Information Technology (IT) field is to identify and hire individuals who possess the right blend of criteria. The main criteria and sub-criteria that can be considered include technical skills (programming languages, database management, and cloud computing), soft skills (communication, teamwork, and adaptability), educational background (relevant degree, and continuous learning), and a few other criteria. This research aims to evaluate the employer perspective in choosing the best programs in the IT field by using the Fuzzy Analytic Hierarchy Process (FAHP) and Fuzzy Technique for Order Preference by Similarity to Ideal Solution (TOPSIS). To deal with subjectivity and uncertainty in pairwise comparisons of evaluation criteria, the FAHP technique results in a more accurate and broad weighting of these factors. Fuzzy TOPSIS is then used to evaluate the alternatives based on how close they are to an ideal answer, considering the imprecision that comes with human judgment. The objective is to weight and rank the alternatives, main criteria, and sub-criteria that influence the employer perspective. The result of this study shows that Bachelor of Computer Science in Netcentric Computing (0.649) is the best program that employers choose, followed by Bachelor of Information Technology (0.645), while Bachelor of Computer Science (0.629) is the least chosen. The result of the main criteria shows that the top ranking is technical skill (0.7728), and for its sub-criteria is programming languages (0.7684) have the highest weight than database management (0.1225) and cloud computing (0.1091).

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