

**Universiti Teknologi MARA**

**Job Matching Mobile Application using  
Fuzzy Analytic Hierarchy Process  
(FAHP)**

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## STUDENT DECLARATION

I certify that this report and the project to which it refers is the product of my own work and any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with standard referring practices of the discipline.

  
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## ABSTRACT

Selecting a job is an important decision for each individual points of life. More important aspect is how the job seekers make better decision making in order to find a job that fits to their preferences. Conventionally, hiring process does not apply preferences such as criteria to choose the best candidate for the vacancies. Job matching is an innovative method in hiring process to solve this problem. It is a process of pairing a position based on multi-criteria and alternatives. These priorities can be evaluated using Analytic Hierarchy Process (AHP). Due to the subjective and uncertainty dilemma in human opinion toward the preferences, AHP has been integrated with the fuzzy environment to form the Fuzzy Analytic Hierarchy Process (FAHP). FAHP is Multi Criteria Decision Making (MCDM) tool to unravel this setback using triangular fuzzy number (TFN). FAHP consists of three components which are goal, multi-criteria and alternatives. The list of jobs is ranked according to the score based on multi-criteria and alternatives job seekers' preferences. The highest score of weight is obtained to find the best matched job for the job seekers which is the goal. FAHP is implemented in the job matching process. This project's aim is to assist the job seekers to find ICT jobs that match to their preferences. Findings of this project is portrayed as conceptual framework that consists the structure of job matching mobile application using FAHP algorithm. Evaluation is conducted using accuracy test where the result of this application is compared to the manual method using a survey. The average of accuracy of this project is 52%. The result has a low percentage as the factor of uncertainty of human opinion which is difficult to be analyzed and determined. For future works, the scope, amount of jobs and performance can be extended by implementing APIs from existing job finder website, cloud computing and parallel processing respectively.

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