

Universiti Teknologi MARA

**PERSONALIZED JOB RECOMMENDER
SYSTEM USING CONTENT-BASED FILTERING
FOR UiTM MACHANG GRADUATES**

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**Thesis submitted in fulfilment of the requirements for
Bachelor of Information Technology (Hons.) Faculty of
Computer and Mathematical Sciences**

JULY 2025

ACKNOWLEDGMENT

Alhamdulillah, thanks to Allah S.W.T for His grace, mercy, and blessings that have enabled me to successfully complete this final year project titled "Personalized Job Recommender System Using Content-Based Filtering for UiTM Machang Graduates".

I would like to extend my highest appreciation and sincerest gratitude to my supervisor, Puan Wan Salfarina Binti Wan Husain, for her worthy guidance, constructive feedback, and motivation throughout this project. Her supervision played an important role in shaping my understanding and navigating me throughout the development process from the beginning stages to its finalization.

My heartfelt thanks also go to my dear parents and family for their continued prayer, patience, and encouragement. Their faith in my ability has been an enduring source of strength and inspiration. My thanks are also extended to my colleagues and friends, specifically those in the same course of study, who have shared ideas, offered technical assistance, and encouraged me with words and actions.

Last but not least, I want to thank me. I want to thank me for believing in me. I want to thank me for doing all this hard work. I want to thank me for having no days off. I want to thank me for, for never quitting. I want to thank me for always being a giver. And tryna give more than I receive. I want to thank me for tryna do more right than wrong. I want to thank me for just being me at all times.

ABSTRACT

Traditional methods for finding jobs include inefficiencies in irrelevant job listing and inability to provide personalized recommendations based on the user's specific skills, career goals, and preferences. The Personalized Job Recommender System is designed to help graduates from UiTM Machang face the challenges of an overwhelming job market. In an attempt to solve these challenges, Personalized Job Recommender System integrates recommendation techniques in developing a system that offers personalized job suggestions. The system is developed on the Agile framework, an iterative and collaborative methodology that emphasizes user feedback and continuous improvement. The system has a streamlined interface that allows users to create profiles, receive job recommendations, and apply for positions with ease. The System Usability Scale (SUS) and User Acceptance Testing (UAT) are used to evaluate the system's usability because they are well-known and trusted methods for measuring user experience. Early feedback has been very promising and assures that this system holds immense potential for improving job searching to lower the manual searches and raise the accuracy of the job matching for increased employment success rate among the graduates to make entry into the workforce easier. The Personalized Job Recommender System makes the job searching process easy and at the same time, contributes toward closing the gap between graduates and suitable employment chances. Further development will be directed to extend the system for wider coverage, including other industries and also experienced workers, to make it scalable and relevant in a continuously changing labor market. Advanced features, such as AI-driven recommendation algorithms, integration with real-time job market APIs, and mobile application support, are planned to improve personalization and accessibility.

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CHAPTER 1

INTRODUCTION

This chapter introduces the project on the development of a Personalized Job Recommender System. It provides an overview of the background that motivates the project, identifies the problem statements, and outlines the research questions and objectives. The chapter also defines the scope of the study, highlights the significance of the project, and presents the expected outcomes. Finally, it addresses the limitations of the project and summarizes the chapter.

1.1 Research Background

Millions of individuals worldwide actively search for new job opportunities on a daily basis. The group is diverse and comprises fresh graduates hoping to land the ideal entry-level job to begin their professional lives, those hoping to make career changes or get better paying jobs, and those who have just lost their jobs and desperately need new means of livelihood (Filipenco, 2023). With so many individuals going through various phases of their working life, the need for affordable, applicable, and customized career search platforms has never been more critical. But the more job openings there are and less filtering by individual qualifications and aspirations, job searching becomes increasingly challenging over time, particularly for new graduates who might lack the experience or confidence to manage the market effectively. The current job-seeking landscape presents significant challenges for graduate students, particularly those from UiTM Machang. Most of the current job-seeking websites simply overwhelm a user with a huge volume of postings irrelevant to the users' academic qualification, skill, and career goal (Bobadilla et al., 2013).