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CUTI – CUTI MALAYSIA RECOMMENDER SYSTEM USING ANT COLONY OPTIMIZATION (ACO)

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Cuti-cuti Malaysia Recommender System using Ant Colony Optimization (ACO)

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JULY 24, 2017

STUDENT DECLARATION

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

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ABSTRACT

Travelling has become one of the most popular hobbies among people. Therefore, Cuti-cuti Malaysia Recommendation System is developed to help in planning and suggesting trip in the field of tourism. Although it could suggest and recommend the best places, it takes a longer time to process and produce the best result. This is due to there is no optimization concept applies in it. Therefore, to overcome this problem this project used Ant Colony Optimization (ACO) technique and explained how this technique operates to solve tourism problem. ACO is known as the technique which inspire from the behavior of ants. It solves optimization problem by following the five main phases of ACO. From this step, it shows that the higher the number of population and generation of ant, the higher the convergence value of the system. As the result, the system finally produces the best result by suggesting the best vacation places based on user personality and preferences. Execution of the ACO algorithm shows that the algorithm able to produce optimum solution towards the said problem.

Keyword: Recommendation System, Ant Colony Optimization