**COMP 8700 Fall 2020 Final Project**

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***Abstract –*** this is the report of our team final project of Artificial Intelligence Introduction, in this project, we have experimented and explored a set of search algorithms including informed and uninformed ones with the famous Eight Puzzles Game, and found that the performance of different algorithms varies markedly in terms of efficiency, optimality and completeness.

1. **Introduction**

A Recommender System or a Recommendation System is an important subclass of Machine Learning Algorithms that seeks to provide a relevant suggestion to its user, based on the input. The recommendations are based on the ‘ratings’ or ‘preferences’ a user would give to an item. The item could be a book, game, movie, etc. This ‘Movie Recommendation System’ is a scalable, IBM cloud-based movie recommendation system. It suggests its user a set of movies that he/she may find interesting which would be based on his/her historical preferences among movies.

The main need in today’s world is to personalize the content according to its user. Due to the emergence of new technologies, many retail businesses with brick and mortar stores have moved online. Every customer who shops online or uses any subscription-based services wants a personalized experience. For a user to find its product instantly, without navigating throughout the website, personalized recommendations are required [1].