

VIETNAM NATIONAL UNIVERSITY HO CHI MINH CITY
UNIVERSITY OF SCIENCE
FACULTY OF INFORMATION TECHNOLOGY



Search

COURSE NAME: Fundamentals of Artificial Intelligence

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1 Information

1.1 Student Information

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2 Abstract

This report details the implementation and evaluation of five fundamental graph search algorithms: Breadth First Search (BFS), Depth First Search (DFS), Uniform-Cost Search (UCS), Greedy Best First Search (GBFS), and A*. Developed within the provided `student_functions.py` framework, the project adheres to specific guidelines and constraints. The report includes a self-assessment of the project's completeness, an exploration of the underlying theories, a comparative analysis of UCS and A* algorithms, and the implementation of additional search algorithms for extra credit. This work demonstrates a comprehensive understanding of various graph search strategies, their theoretical foundations, and practical applications.