

10/03/2018

PROJECT SPECIFICATION

Implement a Planning Search

Planning Problem Representation

CRITERIA	MEETS SPECIFICATIONS
Are the problems in the my_air_cargo_problems.py module correctly represented?	The problems and class methods in the my_air_cargo_problems.py module are correctly represented.
Is an optimal sequence of actions identified for each problem?	An optimal sequence of actions is identified for each problem in the written report.

Automated Heuristics

CRITERIA	MEETS SPECIFICATIONS
Are the automated heuristics for planning searches correctly implemented?	Automated heuristics "ignore-preconditions" and "level-sum" (planning graph) are correctly implemented.

Performance Comparison

CRITERIA	MEETS SPECIFICATIONS
Is a sufficient number of planning algorithms and heuristics compared on an appropriate number of problems?	At least three uninformed planning algorithms (including breadth- and depth-first search) are compared on all three problems, and at least two automatic heuristics are used with A* search for planning on all three problems including "ignore-preconditions" and "level-sum" from the Planning Graph.
Does the performance comparison analyze the performance of the algorithms compared?	A brief report lists (using a table and any appropriate visualizations) and verbally describes the performance of the algorithms on the problems compared, including the optimality of the solutions, time elapsed, and the number of node expansions required.
Does the performance comparison give sufficient justification for its results?	The report explains the reason for the observed results using at least one appropriate justification from the video lessons or from outside resources (e.g., Norvig and Russell's textbook).

Research Review

CRITERIA	MEETS SPECIFICATIONS

CRITERIA	MEETS SPECIFICATIONS
Completeness	The report includes a summary of at least three key developments in the field of AI planning and search.

Student FAQ