**Project Part 1 Summary**

*Please submit 1 per team via Moodle (please have only 1 person on the team submit). It is recommended to have this on Github too, in case someone forgets to submit it on Moodle.*

TEAM NAME:

|  |  |  |
| --- | --- | --- |
| **Algorithm + Problem** | **TOOK OWNERSHIP**  **name** | **userID** |
| Backtracking DFS + Cross-Math | Jingnan Cai | caixx269 |
| A\* + Sliding Puzzle | Kaitlyn Christensen | Chri2970 |
| Genetic Algorithm + n Queens | David Rolfe | Rolf0090 |
| Simulated Annealing + n Queens |  |  |
| Bidirectional Search and Iterative Deepening Search + Tower of Hanoi | Cheng Chen | chen4162 |
| Local Beam Search + nQueens | David Rolfe | Rolf0090 |
| Backtracking DFS + Cryptarithmetic< | Jingnan Cai | caixx269 |
| BFS + Tower of Hanoi (strive for A) | Cheng Chen | chen4162 |

Backtracking DFS ( Jingnan Cai )

Problem Implementation Complete: YES NO

Problem Implementation Correct: YES NO MOSTLY

Algorithm Implementation Complete: YES NO

Algorithm Implementation Correct: YES NO MOSTLY

If this was done collaboratively, please estimate the percentage of each team member's contribution to this algorithm+problem:

KNOWN BUGS or INCOMPLETE PARTS:

COMMENTS:

A\* ( Kaitlyn Christensen )

Problem Implementation Complete: YES NO

Problem Implementation Correct: YES NO MOSTLY

Algorithm Implementation Complete: YES NO

Algorithm Implementation Correct: YES NO MOSTLY

If this was done collaboratively, please estimate the percentage of each team member's contribution to this algorithm+problem:

KNOWN BUGS or INCOMPLETE PARTS:

COMMENTS:

GA or SA ( David Rolfe)

Problem Implementation Complete: YES NO

Problem Implementation Correct: YES NO MOSTLY

Algorithm Implementation Complete: YES NO

Algorithm Implementation Correct: YES NO MOSTLY

If this was done collaboratively, please estimate the percentage of each team member's contribution to this algorithm+problem:

KNOWN BUGS or INCOMPLETE PARTS:

COMMENTS:

GA was implemented for nQueens problem. Should be applicable to other problems but wasn’t tested at this point

Bidirectional + IDDFS (Cheng Chen )

Problem Implementation Complete: YES NO

Problem Implementation Correct: YES NO MOSTLY

Algorithm Implementation Complete: YES NO

Algorithm Implementation Correct: YES NO MOSTLY

If this was done collaboratively, please estimate the percentage of each team member's contribution to this algorithm+problem:

KNOWN BUGS or INCOMPLETE PARTS:

COMMENTS:

Bidirectional and IDDFS were used by The Tower of Hanoi.

FOR ANY ADDITIONAL WORK, please provide a similar format to that above.

Local Beam Search (David Rolfe)

Problem Implementation Complete: YES NO

Problem Implementation Correct: YES NO MOSTLY

Algorithm Implementation Complete: YES NO

Algorithm Implementation Correct: YES NO MOSTLY

If this was done collaboratively, please estimate the percentage of each team member's contribution to this algorithm+problem:

KNOWN BUGS or INCOMPLETE PARTS:

COMMENTS:

Local Beam Search is being implemented by David Rolfe as part of the strive for an A

Doesn’t always find a solution. This is known behavior for this algorithm which does not explore the entire search space but I felt that I should note it down here. From what I tested with the default heuristic function I gave it, it finds a solution for size 4 and 8 test cases of the nQueens problem but fails to find a solution for the size 6 test case.

FOR ANY ADDITIONAL WORK, please provide a similar format to that above.

BFS (Cheng Chen )

Problem Implementation Complete: YES NO

Problem Implementation Correct: YES NO MOSTLY

Algorithm Implementation Complete: YES NO

Algorithm Implementation Correct: YES NO MOSTLY

If this was done collaboratively, please estimate the percentage of each team member's contribution to this algorithm+problem:

KNOWN BUGS or INCOMPLETE PARTS:

COMMENTS:

The BFS search was used by the Tower of Hanoi and it is the part of the strive for A.