AI Search Algorithms

time on level easy

nodes on level easy

iterations on level easy

relative error on level easy

time on level medium

nodes on level medium

BFS

DFS

IDS

Algorithms

iterations on level medium

Algorithms

relative error on level medium

Algorithms

time on level hard

Algorithms

nodes on level hard

Algorithms

iterations on level hard

Algorithms

relative error on level hard

time on level easy for Greedy

time on level easy for A* search

time on level easy for Weighted A* search

nodes on level easy for Greedy

nodes on level easy for A* search

nodes on level easy for Weighted A* search

iterations on level easy for Greedy

iterations on level easy for A* search

iterations on level easy for Weighted A* search

relative error on level easy for Greedy

relative error on level easy for A* search

relative error on level easy for Weighted A* search

-0.5

-1

| h1 | h2 | h3 | h4 | h5 | h6 | h7 | h8 |

Heuristics

time on level medium for Greedy

1.2
1
0.8
0.6
0.4
0.2
0

time

| h1 | h2 | h3 | h4 | h5 | h6 | h7 | h8 |

Heuristics

time on level medium for A* search

0.8

0.6

0.4

0.2

0

time

| h1 | h2 | h3 | h4 | h5 | h6 | h7 | h8 |

Heuristics

time on level medium for Weighted A* search

0.7
0.6
0.5
0.4
0.3
0.2
0.1
0

time

| h1 | h2 | h3 | h4 | h5 | h6 | h7 | h8 |

Heuristics

nodes on level medium for Greedy

1200
1000
800
600
400
200
0

nodes

| h1 | h2 | h3 | h4 | h5 | h6 | h7 | h8 |

Heuristics

nodes on level medium for A* search

800

600

400

200

0

nodes

| h1 | h2 | h3 | h4 | h5 | h6 | h7 | h8 |

Heuristics

nodes on level medium for Weighted A* search

700

600

500

400

300

nodes

iterations on level medium for Greedy

iterations on level medium for A* search

iterations on level medium for Weighted A* search

relative error on level medium for Greedy

relative error on level medium for A* search

relative error on level medium for Weighted A* search

time on level hard for Greedy

0.3

0.25

0.2

0.15

0.1

0.05

0

time

h1   h2   h3   h4   h5   h6   h7   h8

Heuristics

time on level hard for A* search

1

0.8

0.6

0.4

0.2

0

time

h1   h2   h3   h4   h5   h6   h7   h8

Heuristics

time on level hard for Weighted A* search
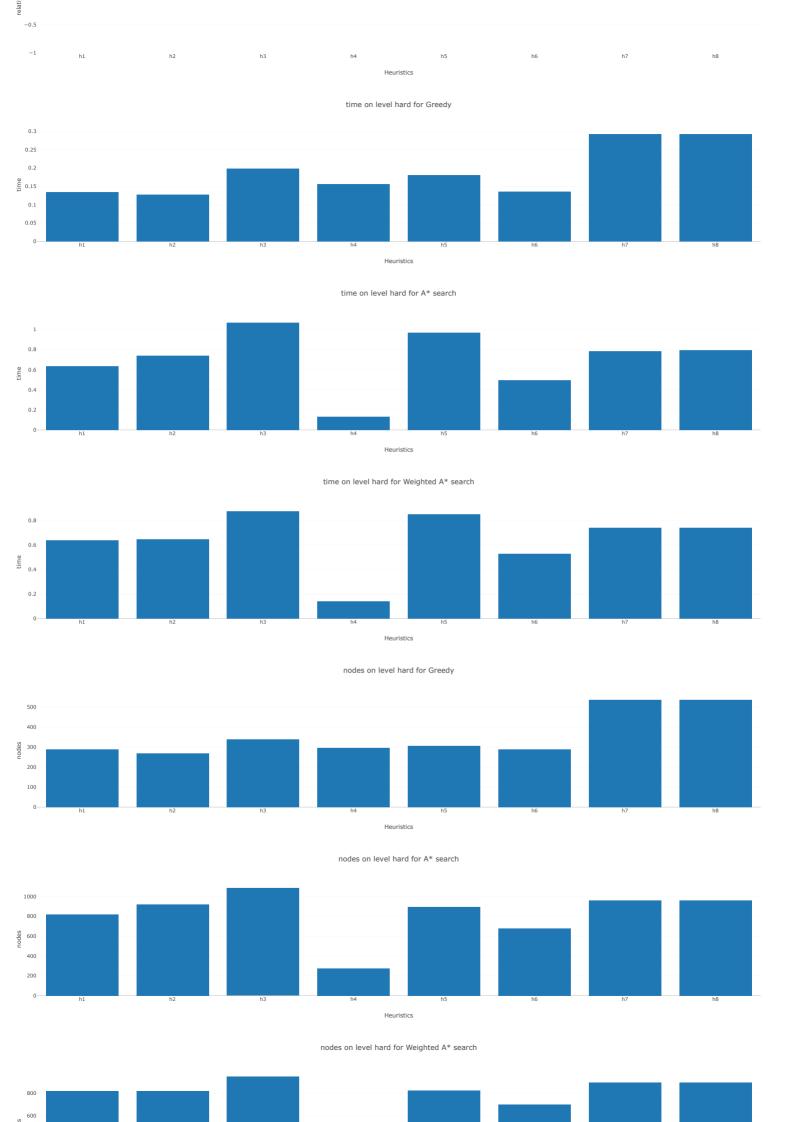
0.8

0.6

0.4

0.2

0

time

h1   h2   h3   h4   h5   h6   h7   h8

Heuristics

nodes on level hard for Greedy

500

400

300

200

100

0

nodes

h1   h2   h3   h4   h5   h6   h7   h8

Heuristics

nodes on level hard for A* search

1000

800

600

400

200

0

nodes

h1   h2   h3   h4   h5   h6   h7   h8

Heuristics

nodes on level hard for Weighted A* search

800

600

s

iterations on level hard for Greedy

iterations on level hard for A* search

iterations on level hard for Weighted A* search

relative error on level hard for Greedy

relative error on level hard for A* search

relative error on level hard for Weighted A* search