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

iterations

80k

60k

40k

20k

0

BFS

DFS

IDS

Algorithms

relative error on level medium

relative error

1400

1200

1000

800

600

400

200

0

BFS

DFS

IDS

Algorithms

time on level hard

time

100k

80k

60k

40k

20k

0

BFS

DFS

IDS

Algorithms

nodes on level hard

nodes

100k

80k

60k

40k

20k

0

BFS

DFS

IDS

Algorithms

iterations on level hard

iterations

100k

80k

60k

40k

20k

0

BFS

DFS

IDS

Algorithms

relative error on level hard

relative error

400

300

200

100

BFS

DFS

IDS

time on level easy for Greedy

Heuristics

time on level easy for A* search

Heuristics

time on level easy for Weighted A* search

Heuristics

nodes on level easy for Greedy

Heuristics

nodes on level easy for A* search

Heuristics

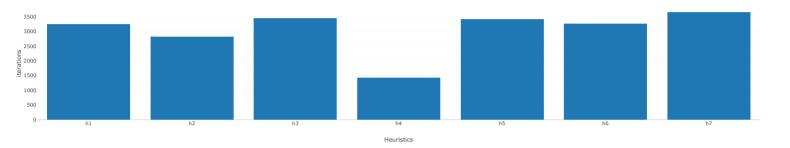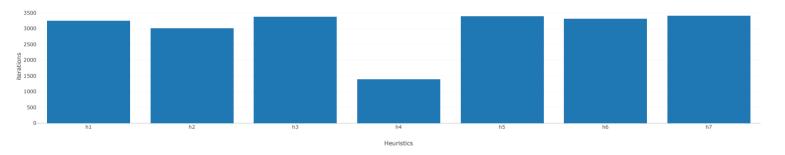## nodes on level easy for Weighted A* search
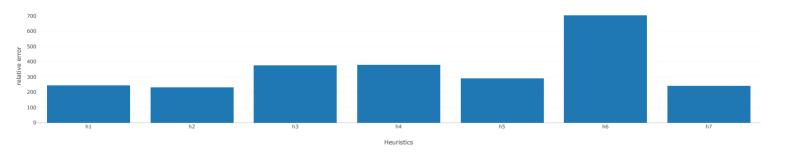
iterations on level easy for Greedy

iterations on level easy for A* search

iterations on level easy for Weighted A* search
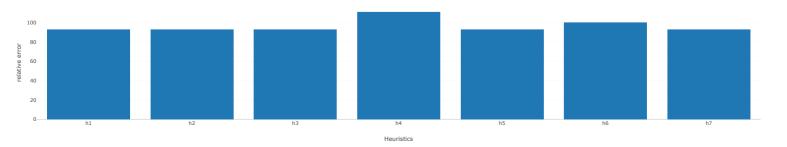

relative error on level easy for Greedy

relative error on level easy for A* search

relative error on level easy for Weighted A* search

time on level medium for Greedy

time on level medium for A* search

time on level medium for Weighted A* search

nodes on level medium for Greedy

nodes on level medium for A* search

nodes on level medium for Weighted A* search

200

h1 h2 h3 h4 h5 h6 h7

Heuristics

iterations on level medium for Greedy

150

100

iterations

50

0

h1 h2 h3 h4 h5 h6 h7

Heuristics

iterations on level medium for A* search

400

300

iterations

200

100

0

h1 h2 h3 h4 h5 h6 h7

Heuristics

iterations on level medium for Weighted A* search

400

300

iterations

200

100

0

h1 h2 h3 h4 h5 h6 h7

Heuristics

relative error on level medium for Greedy

50

40

relative error

30

20

10

0

h1 h2 h3 h4 h5 h6 h7

Heuristics

relative error on level medium for A* search

1

0.5

relative error

0

−0.5

−1

h1 h2 h3 h4 h5 h6 h7

Heuristics

relative error on level medium for Weighted A* search

1

0.5

ive error

0

relat

-0.5

-1

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

Heuristics

time on level hard for Greedy

Heuristics

time on level hard for A* search

Heuristics

time on level hard for Weighted A* search

Heuristics

nodes on level hard for Greedy

Heuristics

nodes on level hard for A* search

Heuristics

nodes on level hard for Weighted A* search

nod

h1 h2 h3 h4 h5 h6 h7

Heuristics

iterations on level hard for Greedy

1500

iterations

1000

500

0

h1 h2 h3 h4 h5 h6 h7

Heuristics

iterations on level hard for A* search

3500
3000
2500
2000
1500
1000
500
0

iterations

h1 h2 h3 h4 h5 h6 h7

Heuristics

iterations on level hard for Weighted A* search

3500
3000
2500
2000
1500
1000
500
0

iterations

h1 h2 h3 h4 h5 h6 h7

Heuristics

relative error on level hard for Greedy

700
600
500
400
300
200
100
0

relative error

h1 h2 h3 h4 h5 h6 h7

Heuristics

relative error on level hard for A* search

100

80

60

40

20

0

relative error

h1 h2 h3 h4 h5 h6 h7

Heuristics

relative error on level hard for Weighted A* search

100

80

ror