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## Python人工智能算法工具包：SimpleAI

Python (/lib/tag/Python) 2013-01-17 09:11:28 发布

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SimpleAI 是 Python 实现的人工智能算法工具包，示例代码：



```
from simpleai.search import SearchProblem, astar

GOAL = 'HELLO WORLD'

class HelloProblem(SearchProblem):
    def actions(self, state):
        if len(state) < len(GOAL):
            return list(' ABCDEFGHIJKLMNOPQRSTUVWXYZ')
        else:
            return []

    def result(self, state, action):
        return state + action

    def is_goal(self, state):
        return state == GOAL

    def heuristic(self, state):
        # how far are we from the goal?
        wrong = sum([1 if state[i] != GOAL[i] else 0
                     for i in range(len(state))])
        missing = len(GOAL) - len(state)
        return wrong + missing

problem = HelloProblem(initial_state='')
result = astar(problem)

print result.state
print result.path()
```

项目主页：<http://www.open-open.com/lib/view/home/1358383704246> (<http://www.open-open.com/lib/view/home/1358383704246>)

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Python机器学习库 (</lib/view/open1451046237542.html>)

Python 原生的 GUI 工具包：Toga (</lib/view/open1407662132957.html>)



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simpleai-team (<https://github.com/simpleai-team>) / simpleai

(<https://github.com/simpleai-team/simpleai/watchers>) Fork 175 (<https://github.com/simpleai-team/simpleai/network>)

项目描述

: simple artificial intelligence utilities — 查看更多内容... (<https://github.com/simpleai-team/simpleai#readme>)

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问题列表

: (<https://github.com/simpleai-team/simpleai/issues>)

#70	Added a weighted hill climbing local search algorithm ( <a href="https://github.com/simpleai-team/simpleai/pull/70">https://github.com/simpleai-team/simpleai/pull/70</a> )	由 yonilx ( <a href="https://github.com/yonilx">https://github.com/yonilx</a> )	2017-12-10
#68	Fix py3 web viewer ( <a href="https://github.com/simpleai-team/simpleai/pull/68">https://github.com/simpleai-team/simpleai/pull/68</a> )	由 FD253 ( <a href="https://github.com/FD253">https://github.com/FD253</a> )	2016-12-01
#65	Genetic Algorithm ( <a href="https://github.com/simpleai-team/simpleai/issues/65">https://github.com/simpleai-team/simpleai/issues/65</a> )	由 jrandson ( <a href="https://github.com/jrandson">https://github.com/jrandson</a> )	2016-07-06
#64	How to limit actions to be used once in the tree ( <a href="https://github.com/simpleai-team/simpleai/issues/64">https://github.com/simpleai-team/simpleai/issues/64</a> )	由 AlexisTM ( <a href="https://github.com/AlexisTM">https://github.com/AlexisTM</a> )	2016-03-15
#50	PEP8 ( <a href="https://github.com/simpleai-team/simpleai/pull/50">https://github.com/simpleai-team/simpleai/pull/50</a> )	由 fjcapdevila ( <a href="https://github.com/fjcapdevila">https://github.com/fjcapdevila</a> )	2014-06-22

主分支 (<https://github.com/simpleai-team/simpleai/tree/master>)

代码更新时间：2017-12-10

开发语言：Python

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(<https://github.com/simpleai-team/simpleai>)

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1. Python UI 开发工具包，Kivy 1.9.0 发布 (<http://www.open-open.com/news/view/125ec4>)
2. Python 的 UI 开发工具包，Kivy 1.9.1 发布 (<http://www.open-open.com/news/view/607ec0>)
3. Python开发工具 gEcrit 2.8.1 发布 (<http://www.open-open.com/news/view/1fbdcc6>)
4. Python机器学习工具包，Milk 0.4.3 发布 (<http://www.open-open.com/news/view/a6dd74>)
5. Python 开发工具 gEcrit 2.8.2 发布 (<http://www.open-open.com/news/view/1b781f8>)
6. Python后端相关技术/工具栈 (<http://www.open-open.com/news/view/d553ee>)

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1. 一文读懂机器学习，大数据/自然语言处理/算法全有了..... (</lib/view/open1420615208000.html>)
2. 各种Java加密算法 (</lib/view/open1397274257325.html>)
3. C语言的学习基础,100个经典的算法 (</lib/view/open1364807445109.html>)
4. MapReduce 模式、算法和用例 ( MapReduce Patterns, Algorithms, and Use Cases) (</lib/view/open1330094286171.html>)
5. Java RSA 加密解密算法 入门 (</lib/view/open1346633931975.html>)
6. Mahout算法集 (</lib/view/open1383390452040.html>)



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