AutoGPT太火了, GitHub 16.8万星!

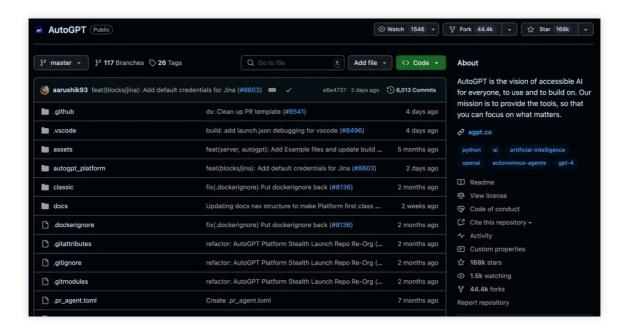
机器学习算法与Python学习 2024年11月12日 20:54 北京



机器之心报道

OpenAl 的 Andrej Karpathy 都大力宣传,认为 AutoGPT 是 prompt 工程的下一个前沿。

最近一个名为 AutoGPT 的研究开始走进大众视野。项目一经上线,短短几天狂揽 168k + 星,这也侧面 验证了项目的火爆。

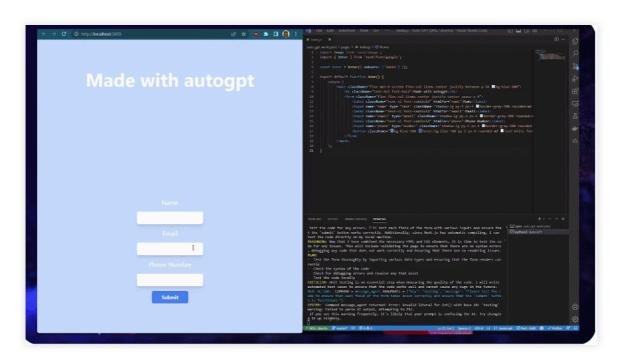


GitHub 地址: https://github.com/torantulino/auto-gpt

问题来了,AutoGPT 到底是什么?它是一个实验性的开源应用程序,展示了 GPT-4语言模型的功能。该程序由 GPT-4驱动,可以自主实现用户设定的任何目标。

具体来说,AutoGPT 相当于给基于 GPT 的模型一个内存和一个身体。有了它,你可以把一项任务交给 AI 智能体,让它自主地提出一个计划,然后执行计划。此外其还具有互联网访问、长期和短期内存管 理、用于文本生成的 GPT-4 实例以及使用 GPT-3.5 进行文件存储和生成摘要等功能。AutoGPT 用处很多,可用来分析市场并提出交易策略、提供客户服务、进行营销等其他需要持续更新的任务。

正如网友所说 AutoGPT 正在互联网上掀起一场风暴,它无处不在。很快,已经有网友上手实验了,该用户让 AutoGPT 建立一个网站,不到 3 分钟 AutoGPT 就成功了。期间 AutoGPT 使用了 React 和 Tailwind CSS,全凭自己,人类没有插手。看来程序员之后真就不再需要编码了。



之后该用户补充说,自己的目标很简单,就是用 React 创建一个网站。提出的要求是:创建一个表单,添加标题「Made with autogpt」,然后将背景更改为蓝色。AutoGPT 成功的构建了网站。该用户还表示,如果给 AutoGPT 的 prompt 更多,表现会更好。

```
Welcome to Auto-GPT! Enter the name of your AI and its role below. Entering nothing will load defaults.

Name your AI: For example, 'Entrepreneur-GPT'

AI Name: FullStackGPT

FullStackGPT here! I am at your service.

Describe your AI's role: For example, 'an AI designed to autonomously develop and run businesses with the sole goal of increasing your net worth.'

FullStackGPT is: An autonomous AI designed to built websites using reactjs and tailwindcss

Enter up to 5 goals for your AI: For example: Increase net worth, Grow Twitter Account, Develop and mana ge multiple businesses autonomously'

Enter nothing to load defaults, enter nothing when finished.

Goal 1: Update and modify the existing code inside on pages/index js to create a form field Goal 2: Create a basic form input with a name, email, and phone address

Goal 3: Update the styling so the background is a light blue, add a button Goal 4: center the form and add a header "made with autogpt"

Goal 5: make sure to write the code only in the file located at pages/index.js
```

接下里我们再看一个例子。假装自己经营一家鞋公司,给 AutoGPT 下达的命令是对防水鞋进行市场调查,然后让其给出 top5 公司,并报告竞争对手的优缺点:

```
AI Name: ResearchGPT

ResearchGPT is: ai agent designed to autonomously create market research for a given idea

Goals:

Goal 1: Do market research for waterproof shoes
Goal 2: get the top 5 competitors and list their pros and cons
Goal 3: include the price for each, save the analysis somewhere
Goal 4: once done, terminate
Goal 5:
```

首先,AutoGPT 直接去谷歌搜索,然后找防水鞋综合评估 top 5 的公司。一旦找到相关链接,AutoGPT 就会为自己提出一些问题,例如「每双鞋的优缺点是什么、每款排名前 5 的防水鞋的优缺点是什么、男士排名前 5 的防水鞋」等。

之后,AutoGPT继续分析其他各类网站,并结合谷歌搜索,更新查询,直到对结果满意为止。期间,AutoGPT能够判断哪些评论可能偏向于伪造,因此它必须验证评论者。

RESEARCHGPT THOUGHTS: The website content summary is not detailed enough to enable me to find the waterproof shoes' exact pros and cons. Therefore, I need to search the specific brands of each competitor's waterproof shoes on Google and check to see if they have more information on their website, such as product reviews, ratings, and customer feedback, which I can use to compile a more robust list of the top 5 waterproof shoes' pros and cons. Note that I need to be mindful of the reliability of review sources and should use the same ones for each competitor. REASONING: I did not get sufficient information from the first website to proceed with my analysis, so I need to find specific information on each waterproof shoe from Google. With this information, I can create a more detailed and reliable list of the top 5 competitors with thorough coverage of their key attributes, strengths, and weaknesses. - Find the specific brands of each competitor's waterproof shoes Check each brand's website, reviews, ratings, and feedback for key product attributes and features Compile a comprehensive list of the top 5 waterproof shoes' pros and cons and make sure to verify each piece of information with similar sources Save the list for future reference CRITICISM: Some reviews could be biased or fake, and so I must validate the credibility of the site and the reviewer. I must also remember that despite some sites using similar criteria, each site may vary in its weighing of the different aspects, so I must keep this in mind when reviewing the data. I should try to verify the reliability, accuracy, and relevance of the data by comparing it with other sources that are equally reliable.

执行过程中,AutoGPT 甚至衍生出自己的子智能体来执行分析网站的任务,找出解决问题的方法,所有工作完全靠自己。

结果是,AutoGPT 给出了 top 5 防水鞋公司的一份非常详细的报告,报告包含各个公司的优缺点,此外还给出了一个简明扼要的结论。全程只用了8分钟,费用为10美分。期间也完全没有优化。

Competitor Analysis Report: Waterproof Shoes Introduction: Waterproof shoes are essential for people who love outdoor activities such as hiking, camping, and trekking. With the increasing demand for waterproof shoes, various brands have come up with their own offerings. This report aims to provide an analysis of the top 5 competitors of waterproof shoes and their pros and cons. Competitor 1: Columbia - Columbia is a well-known and reputable brand for outdoor gear and footwear. - Their waterproof shoes come in various styles and offer different levels of protection based on the intended activity. - Their prices are competitive in the market. - The waterproofing technology used is of high quality and provides long-lasting protection. - The customer service support is sometimes found to be inadequate. - The sizes can be a bit difficult to get right. Competitor 2: Salomon Pros: - Salomon is a popular brand that offers high-quality waterproof shoes for a variety of outdoor activities. - Their waterproof shoes have excellent ratings in terms of comfort, durability and even in difficult - The prices are quite competitive with other competitors. - The shoes have a distinct, sporty design that is appealing to many consumers. Cons: The waterproofing technology used sometimes doesn't hold up to the claims.The sizing can be difficult to get right for people with wider feet. Competitor 3: Merrell - Merrell is another top brand that offers waterproof shoes for outdoor activities. Their shoes are made of high-quality materials and offer long-lasting protection.
 Their waterproofing technology is unique and provides excellent protection against stains and water damage.
 The shoes are also quite comfortable for long hikes or walks. Cons: - The sizing can be tricky to get right. - Some customers report that the shoes are not as breathable as some other competitors. Competitor 4: KEEN Pros: - KEEN is a popular and well-established footwear brand that offers waterproof shoes. Their shoes are stylish, durable, and come with excellent waterproofing technology. The shoes also offer excellent arch support and shock-absorption. - KEEN has excellent customer support. Cons: Some customers find that the shoes can be a bit heavy and bulky.
 The prices can be a bit on the higher side compared to some competitors. Competitor 5: The North Face - The North Face is a well-known brand that offers a wide range of outdoor gear and footwear. - Their waterproof shoes are known for their quality, durability, and style. - The waterproofing technology used in their shoes is of high quality and provides excellent protection. - The shoes offer excellent traction and stability on difficult terrains. Cons: - The sizing can be a bit off. - The prices can be a bit high when compared to some competitors. In conclusion, there are various options for waterproof shoes in the market, each with its pros and cons. Based on this analysis, Columbia, Salomon, Merrell, KEEN, and The North Face are top competitors in the market, and have their own unique selling points. Understanding their strengths and weaknesses can help customers make an informed purchase decision.

这个能够独立自主完成任务的 AutoGPT 是如何运行的呢? 我们接着来看。

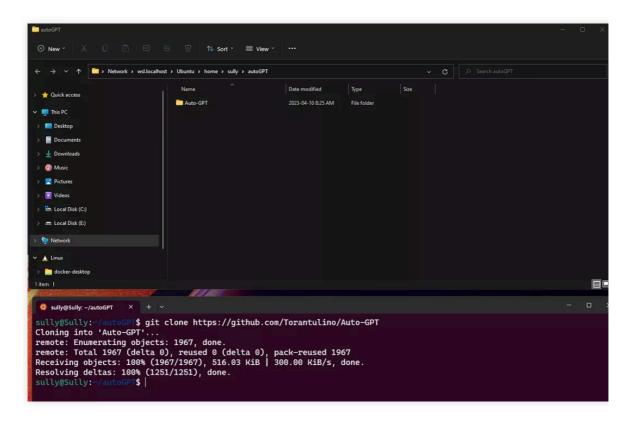
AutoGPT: 30 分钟内构建你自己的 AI 助手

作为风靡互联网的 AI 智能体,Auto GPT 可以在 30 分钟内完成设置。你就可以拥有自己的 AI, 协助完成任务,提升工作效率。

这一强大的 AI 工具能够自主执行各种任务,设置和启动的简便性是一大特征。在开始之前,你需要设置 Git、安装 Python、下载 Docker 桌面、获得一个 OpenAI API 密钥。

克隆存储库

首先从 GitHub 中克隆 AutoGPT 存储库,并导航到新建文件夹 Auto-GPT。



配置环境

在 Auto-GPT 文件夹中,找到.env.template 文件并插入 OpenAI API 密钥。接着复制该文件并重命名为.env。

```
.env.template X
$ .env.template
      PINECONE API KEY=your-pinecone-api-key
      PINECONE ENV=your-pinecone-region
      OPENAI API KEY=your-openai-api-key
      ELEVENLABS API KEY=your-elevenlabs-api-key
      SMART LLM MODEL="gpt-4"
      FAST_LLM_MODEL="gpt-3.5-turbo"
      GOOGLE_API_KEY=
      CUSTOM SEARCH ENGINE ID=
     USE AZURE=False
      OPENAI API BASE=your-base-url-for-azure
10
11
      OPENAI API VERSION=api-version-for-azure
     OPENAI_DEPLOYMENT_ID=deployment-id-for-azure
12
13
      IMAGE PROVIDER=dalle
14
      HUGGINGFACE API TOKEN=
```

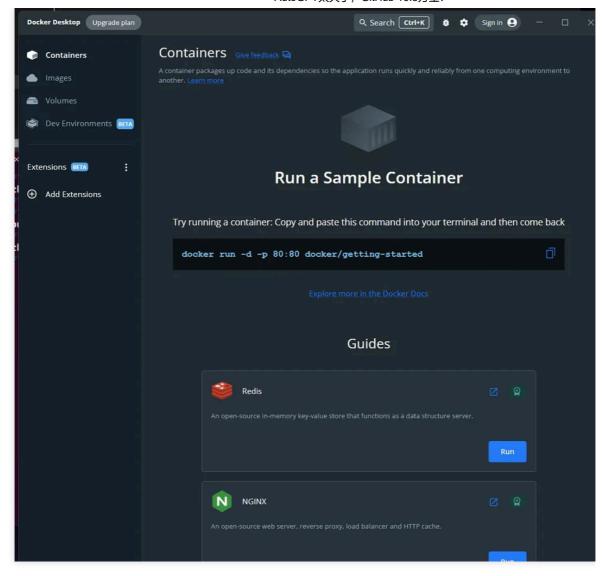
安装 Python 包

运行以下命令,安装需要的 Python 包。

```
pip install -r requirements.txt
```

运行 Docker

运行 Docker 桌面,不需要下载任何容器,只需保证程序处于激活状态。



运行 AutoGPT

```
Welcome to Auto-GPT! Enter the name of your AI and its role below. Entering nothing will load defaults.

Name your AI: For example, 'Entrepreneur-GPT'

AI Name: testGPT

testGPT here! I am at your service.

Describe your AI's role: For example, 'an AI designed to autonomously develop and run businesses with the sole goal of increasing your net worth.'

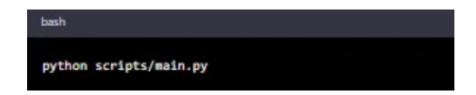
testGPT is: an ai designed to test autoGPT!

Enter up to 5 goals for your AI: For example: Increase net worth, Grow Twitter Account, Develop and manage multiple bus inesses autonomously'

Enter nothing to load defaults, enter nothing when finished.

Goal 1: Make cool stuff
```

执行以下命令,运行 AutoGPT。



设置目标

AutoGPT 虽是一个强大的工具,但并不完美。为避免出现问题,最好从简单的目标开始,对输出进行测试,并根据自身需要调整目标,如上文中的 ResearchGPT。

不过,你如果想要释放 AutoGPT 的全部潜力,需要 GPT-4 API 访问权限。GPT-3.5 可能无法为智能体或响应提供所需的深度。

AgentGPT:浏览器中直接部署自主 AI 智能体

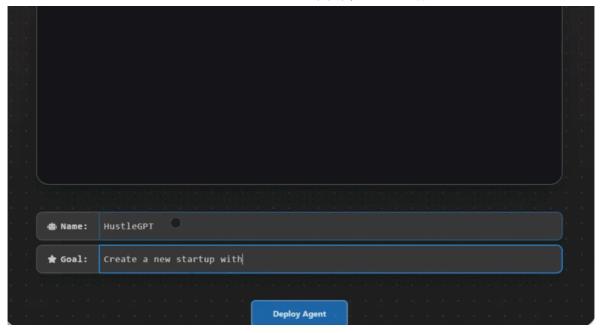
近日,又有开发者对 AutoGPT 展开了新的探索尝试,创建了一个可以在浏览器中组装、配置和部署自主 AI 智能体的项目——AgentGPT。项目主要贡献者之一为亚马逊软件工程师 Asim Shrestha,已在 GitHub 上获得了 31.8k 的 Stars。



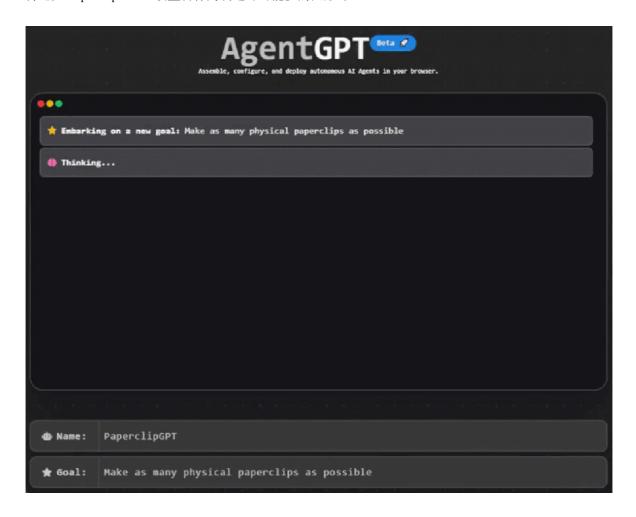
- o 项目主页: https://agentgpt.reworkd.ai/
- GitHub 地址: https://github.com/reworkd/AgentGPT



AgentGPT 允许你为自定义 AI 命名,让它执行任何想要达成的目标。自定义 AI 会思考要完成的任务、执行任务并从结果中学习,试图达成目标。如下为 demo 示例: HustleGPT,设置目标为创立一个只有 100 美元资金的初创公司。



再比如 PaperclipGPT,设置目标为制造尽可能多的回形针。



不过,用户在使用该工具时,同样需要输入自己的 OpenAI API 密钥。AgentGPT 目前处于 beta 阶段,并正致力于长期记忆、网页浏览、网站与用户之间的交互。

GPT 的想象力空间还有多大,我们继续拭目以待。

往期推荐