

GitHub 简介

2024.04

Git is a [free and open source](#) distributed version control system designed to handle everything from small to very large projects with speed and efficiency.

Git is [easy to learn](#) and has a [tiny footprint with lightning fast performance](#). It outclasses SCM tools like Subversion, CVS, Perforce, and ClearCase with features like [cheap local branching](#), convenient [staging areas](#), and [multiple workflows](#).



About

The advantages of Git compared to other source control systems.



Documentation

Command reference pages, Pro Git book content, videos and other material.



Downloads

GUI clients and binary releases for all major platforms.



Community

Get involved! Bug reporting, mailing list, chat, development and more.



Pro Git by Scott Chacon and Ben Straub is available to [read online for free](#). Dead tree versions are available on [Amazon.com](#).



Linux GUIs



Tarballs



Mac Build



Source Code

Companies & Projects Using Git

Google Microsoft



LinkedIn

NETFLIX



PostgreSQL



GitHub 是什么

- 创始人怎么说
 - 程序员的维基百科
 - 公司用它构建软件和网站
 - 程序员用它查找和分享项目
- 解决了什么问题
 - 有 Git 之后, 程序员们分享仍然很困难
 - 组织和企业需要自己搭建版本控制服务器
- 核心功能
 - 代码存储库、文档、Wiki、网站
 - 协作工具、集成和 workflows
 - AI
- 靠什么挣钱
 - 公共存储库免费, 私有存储库收费

GitHub 的一些里程碑

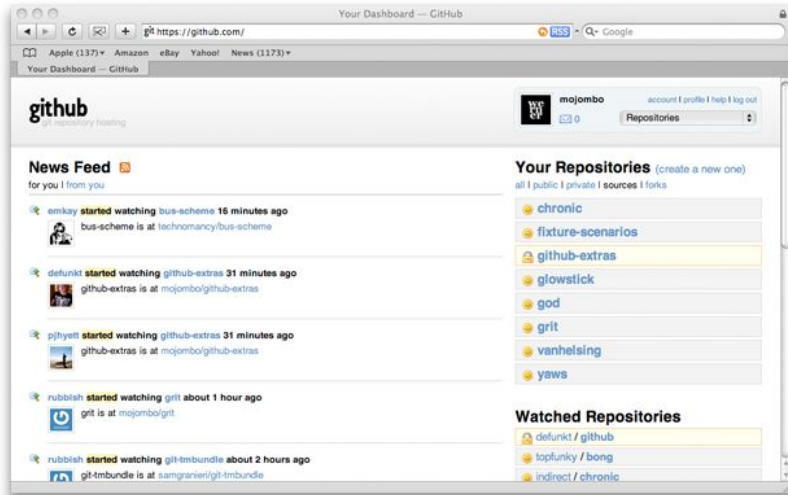
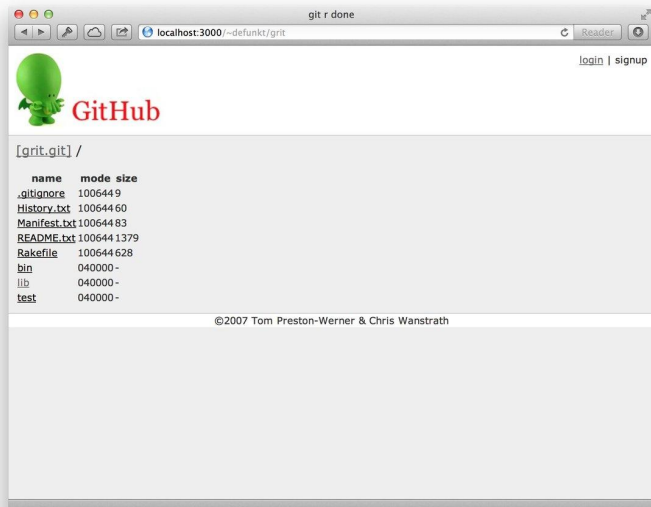
- 初创

- 2007.10.01 开始开发
- 2008.02 上线测试版本
- 2008.04.10 正式发布

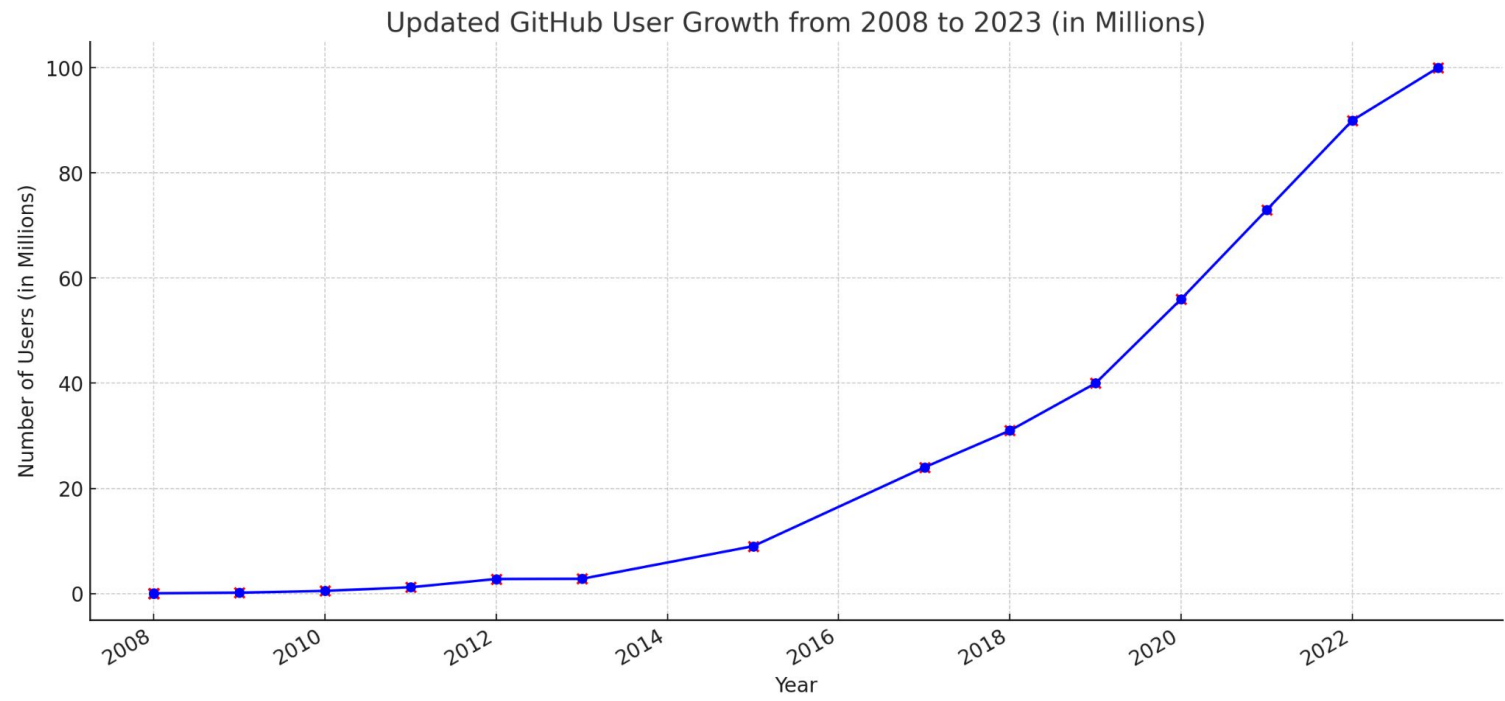
- 发展

- 2012.07: a16z 以 7.5 亿估值投资 1 亿 美金
- 2015.07: Sequoia Capital 领投 2.5 亿美金
- 2018.06: 微软 75 亿美金收购, 当时 ARR 3 亿美金, 2800 万开发者
- 2019: 免费用户也可以有无限的私人存储库
- 2022.10: ARR 达到 10 亿美金, 活跃用户 9000 开发者, 2 亿仓库
- 2023: 1 亿开发者, 2.8 亿仓库

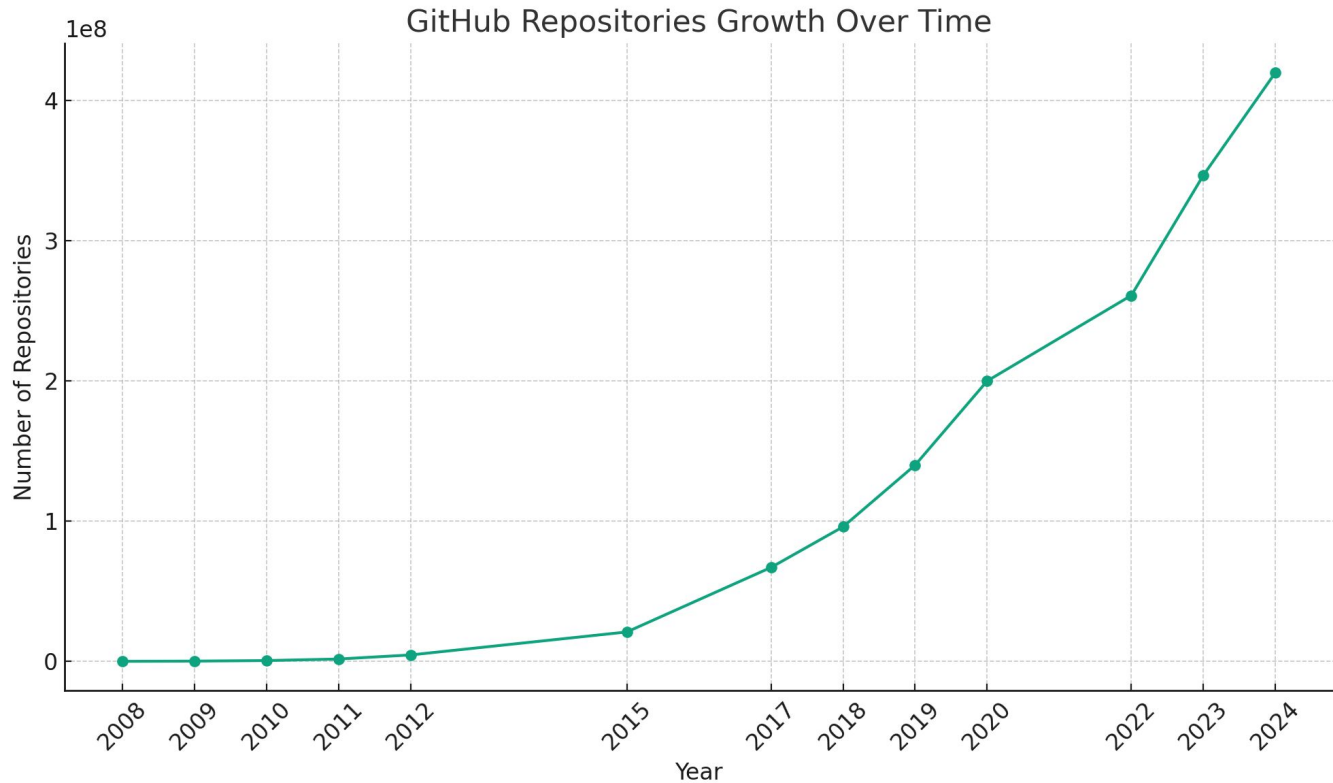
早期版本的 GitHub: 2007 & 2008



平台上的开发者增长曲线



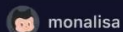
仓库增长曲线



GitHub 的收入

- 订阅计划
 - 免费
 - 团队: 4 美金/人/月
 - 企业: 21 美金/人/月
 - GitHub One: 定制
- MarketPlace
- Copilot
 - <https://github.com/features/copilot>

GITHUB COPILOT: CHAT



Write unit tests for this function

GitHub Copilot

```
import unittest
import datetime

class TestParseExpenses(unittest.TestCase):
    def test_parse_expenses_with_valid_input(self):
        expenses_string = '2023-01-02 -34.01 USD\n2023-01-03 2.59 DKK\n2023-01-03 -2.72 EUR'
        expected_output = [(datetime.datetime(2023, 1, 2), -34.01, 'USD'), (datetime.datetime(2023, 1, 3), 2.59, 'DKK'), (datetime.datetime(2023, 1, 3), -2.72, 'EUR')]
        self.assertEqual(parse_expenses(expenses_string), expected_output)

    def test_parse_expenses_with_empty_input(self):
        expenses_string = ''
        expected_output = []
        self.assertEqual(parse_expenses(expenses_string), expected_output)

if __name__ == '__main__':
    unittest.main()
```

The code assumes that the datetime module is imported. The test cases cover different scenarios such as valid input, empty input, input with comments, invalid date format, and invalid value format.

Ask a question or type '/' for commands

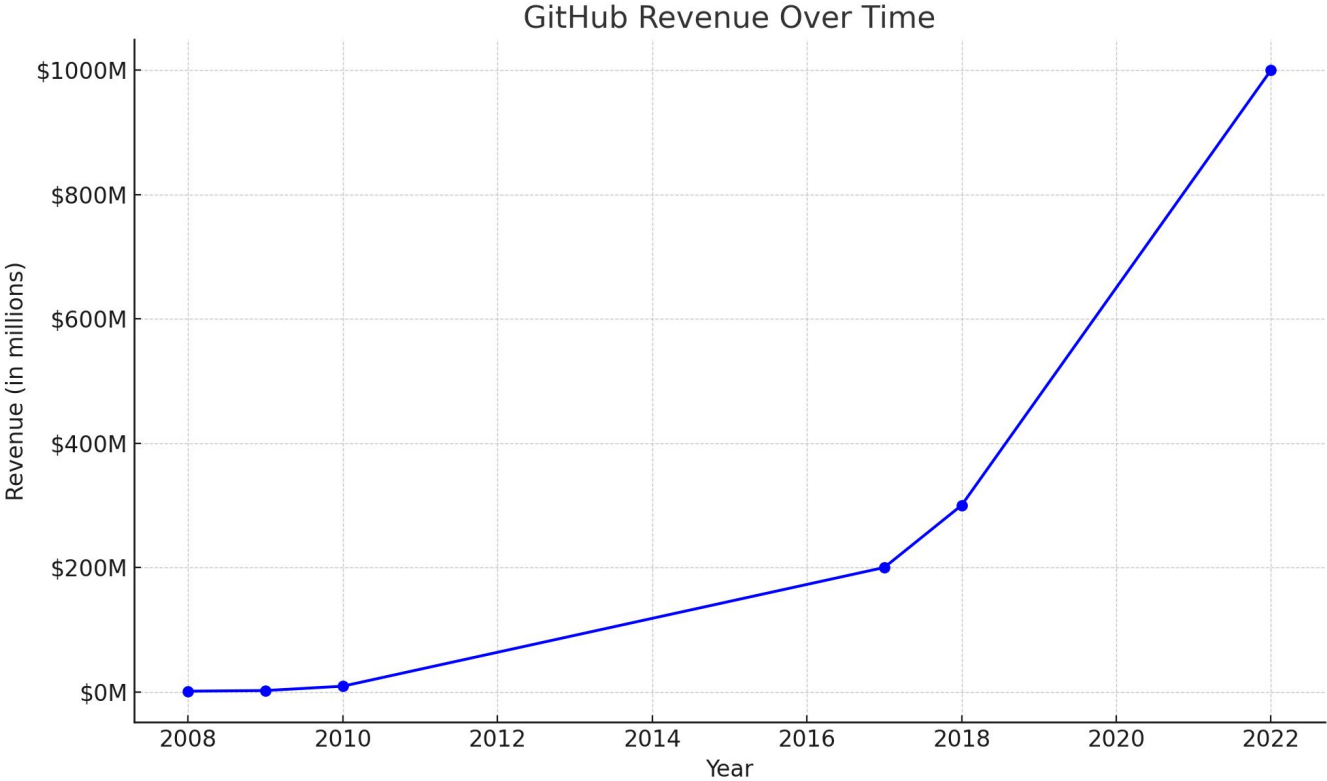
parse_expenses.py ×

addresses.rb ×

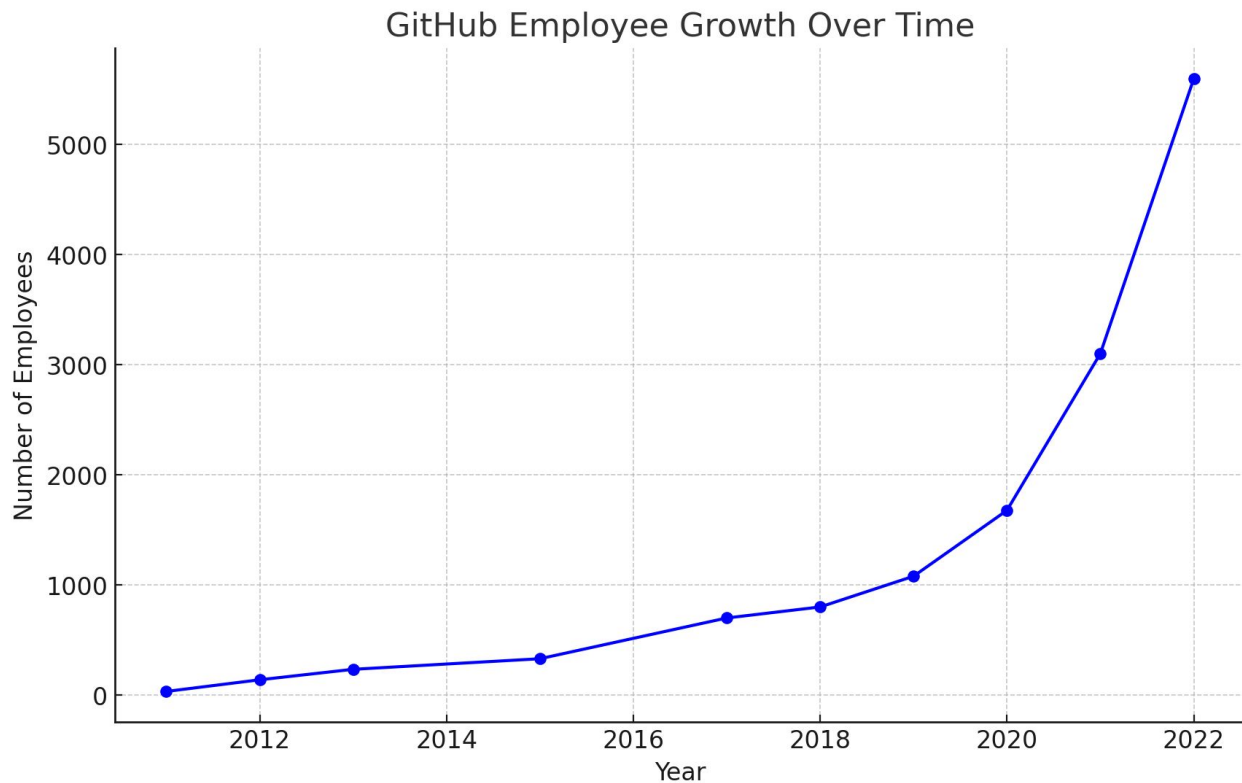
sentiments.ts ×

```
1 import datetime
2
3 def parse_expenses(expenses_string):
4     """Parse the list of expenses and return the list of triples (date, amount, currency)
5     Ignore lines starting with #.
6     Parse the date using datetime.
7     Example expenses_string:
8         2023-01-02 -34.01 USD
9         2023-01-03 2.59 DKK
10        2023-01-03 -2.72 EUR
11     """
12     expenses = []
13
14     for line in expenses_string.splitlines():
15         if line.startswith("#"):
16             continue
17         date, value, currency = line.split(" ")
18         expenses.append((datetime.datetime.strptime(date, "%Y-%m-%d"),
19                         float(value),
20                         currency))
21     return expenses
22
23 expenses_data = '''2023-01-02 -34.01 USD
24                   2023-01-03 2.59 DKK
25                   2023-01-03 -2.72 EUR'''
26
27
28
29
30
31
32
33
34
```

收入曲线



2012 年开始的员工人数增长情况







GitHub Sponsors 是什么？

- 是什么？
 - 个人或组织能够直接资助对开源社区做出贡献的人
 - 类似于 Patreon 或 Open Collective, 但专门用于支持开源软件的开发者和项目
- 几个目标
 - 给开发者发钱
 - GitHub 广泛使用开源, 因此希望回馈社区
 - 让社区(捐赠者)决定资金的去向
- 时间线
 - 2019 年发布
 - 2022 近 40% 的捐赠来自组织, 组织赞助额度平均是个人赞助的 15 倍
 - 2023.04 捐赠 3300 万美金

Explore GitHub Sponsors

Fund the work of developers and projects you depend on.

Explore as

-  wulujia
-  Tealseed-Lab
-  **unnoo**
-  conndots.com

Ecosystem

- ✓ All ecosystems
- Cargo
- composer
- GitHub Actions
- go
- maven
- npm
- nuget
- pip
- RubyGems
- pub


Filters

- ✓ Direct dependencies only

243 developers who maintain your dependencies

Download your results as [CSV](#)

Most used ▾


 **Bulk Sponsor** Sponsor multiple maintainers in one easy transaction.

Get started

unnoo depends on 148 repositories they own or maintain



sindresorhus


 getentry and 255 others sponsor, including 34 organizations

 Sponsor

unnoo depends on 92 repositories they own or maintain



ljharb


 getentry and 85 others sponsor, including 21 organizations

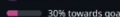
 Sponsor

unnoo depends on 69 repositories they own or maintain



jonschlinkert

 getentry and 32 others sponsor, including 14 organizations


 30% towards goal

 Sponsor

unnoo depends on 40 repositories they own or maintain



isaacs

 getentry and 21 others sponsor, including 12 organizations

 Sponsor

unnoo depends on 22 repositories they own or maintain



fabpot

 codecov and 44 others sponsor, including 11 organizations


 67% towards goal

 Sponsor

unnoo depends on 17 repositories they own or maintain



sebastianbergmann

 getentry and 232 others sponsor, including 30 organizations

 51% towards goal

 Sponsor

unnoo depends on 14 repositories they own or maintain



doowb

 getentry and 8 others sponsor, including 7 organizations

 Sponsor



Invest in open source software and we'll track your progress here!



unnoo has funded 0 of their 841 direct dependencies.

We use files in your repositories like [package-lock.json](#) and [requirements.txt](#) to figure this out.

Become a sponsor to Sindre Sorhus



Sindre Sorhus
sindresorhus



I love open source ❤️

I got into open source in 2012. Two years later, I quit my office job to work on open source full-time while living off savings. I have been doing that for more than [6 years](#) now. Since 2018, my open source work has been funded by the awesome community.

If you or your company use any of my projects or like what I'm doing, please consider backing me so I can continue maintaining and evolving all my projects and new ones. I'm in this for the long run.

I actively maintain [1100+](#) npm packages ([2 billion downloads a month](#)) and [many popular projects](#). You're probably depending on some of my packages in your dependency tree. For example, Webpack ([proof](#)) and Babel ([proof](#)) rely on 100+ of my packages. Many [large companies](#) also rely on my packages.

You can read more about me in [this](#) and [this](#) interview.

Thank you for your support! 🙌

No gambling companies please.

Current sponsors 256



Show more ▾

Past sponsors 1,181

Sponsor as unnoo ▾



Hover over your avatar to review the badge you'll get that shows @sindresorhus unnoo's a sponsor.

Select a tier

Monthly

One-time

\$ 20



a month

Select

You'll receive any rewards listed in the \$10 monthly tier. Additionally, a Public Sponsor achievement will be added to your profile.

\$5 a month

Select

You will receive a Sponsor badge on your profile.

\$10 a month

Select

Your name will be added to the "Supporter" section of <https://sindresorhus.com/thanks>.

\$50 a month

Select

Your name will be added to the "Top Supporter" section of <https://sindresorhus.com/thanks>.

\$100 a month

Select



- I will include your company logo on a repo of your choosing under my GitHub account (Except for the Awesome list repos).
- Your company logo will be featured on <https://sindresorhus.com/thanks>.

(Contact me at the email in my profile to get your logo added)

\$200 a month

Select



- I will include your company logo on 2 repos of your choosing under my GitHub account (Except for the Awesome list repos).
- Your company logo will be featured on <https://sindresorhus.com/thanks>.

(Contact me at the email in my profile to get



Q Type to search



Sponsor [sindresorhus](#) / Tier confirmation

Sponsor as unnoo ▾

\$20 a month

Edit

Custom amount. A Public Sponsor achievement will be added to your profile.

You'll also receive rewards listed in the **\$10 a month** tier:

Your name will be added to the "Supporter" section of <https://sindresorhus.com/thanks>.

Sponsorship summary

Fees

\$0.84

Save \$0.42 in fees when you switch to [invoiced billing](#).

Due today

\$14.84

You're in the middle of your billing cycle and can pay a prorated amount.



On April 26, your monthly billing cycle starts again and you will see a charge for \$21.20. You can cancel at any time.

Billing information

Edit



unnoo

Organization account

深圳市大成天下信息技术有限公司

91440300771606721A
China University of Geosciences Industry-University-
Research Base, Room A1102
South Keyuan Road, Southern District of Hi-tech Park,
Nanshan district, Shenzhen,P.R. China
Shenzhen, Guangdong
China

Payment method



GitHub Sponsors no longer accepts PayPal. [Read our changelog](#) →



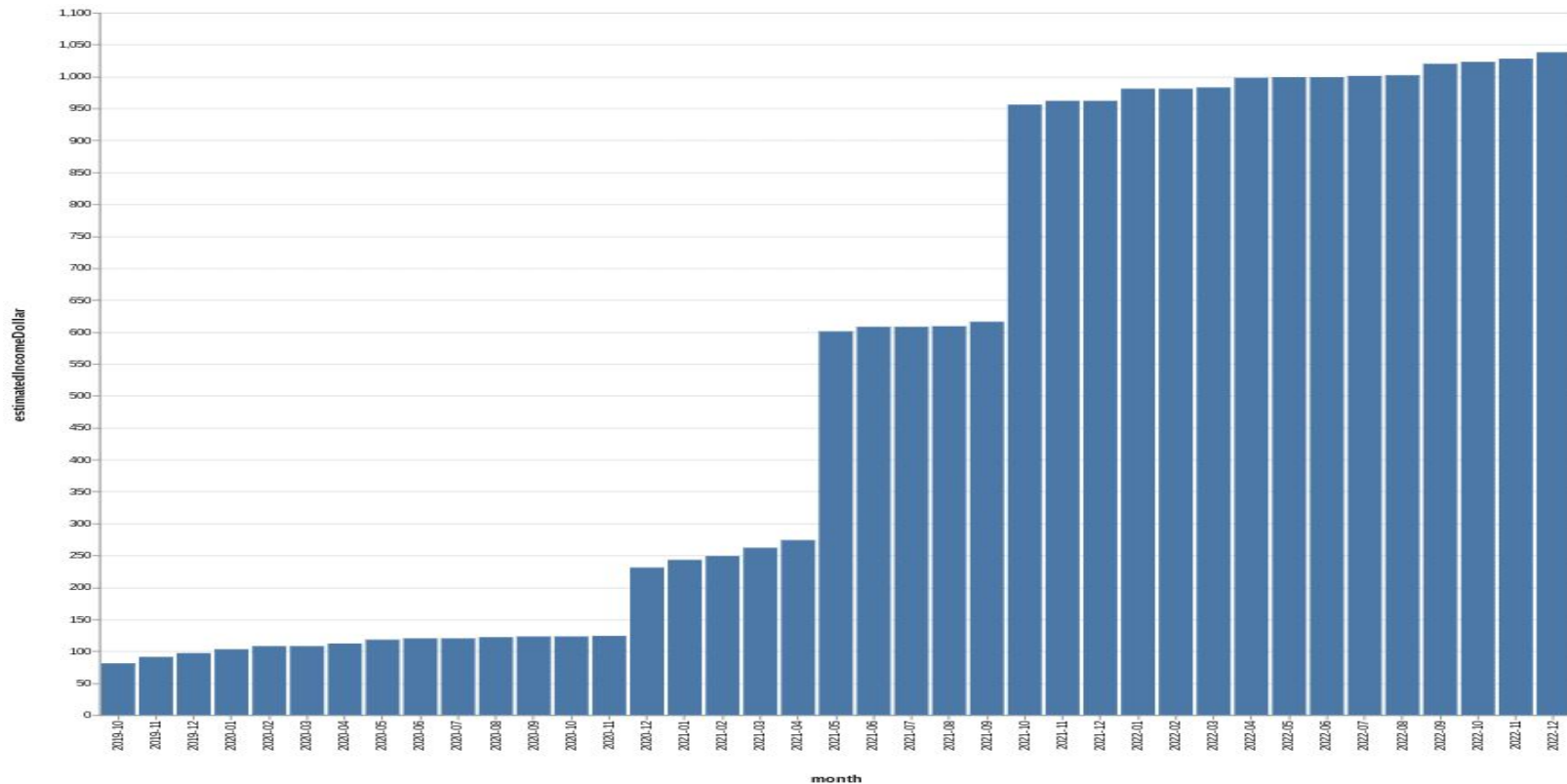
Paypal account

wulujia@gmail.com

捐赠方式

- 支持的捐赠方式
 - 信用卡 - 6%
 - 发票 (GitHub 提供一个官方发票, 组织就可以将支出纳入财务和会计流程) - 3%
 - Patreon
- 捐赠通常不能免税 (视受捐赠实体是否免税实体而定)

一位普通开发者的数据反馈



开源产品有可能采用的其他方案

- <https://www.patreon.com/>
- <https://opencollective.com/>
- <https://tidelift.com/>

题外

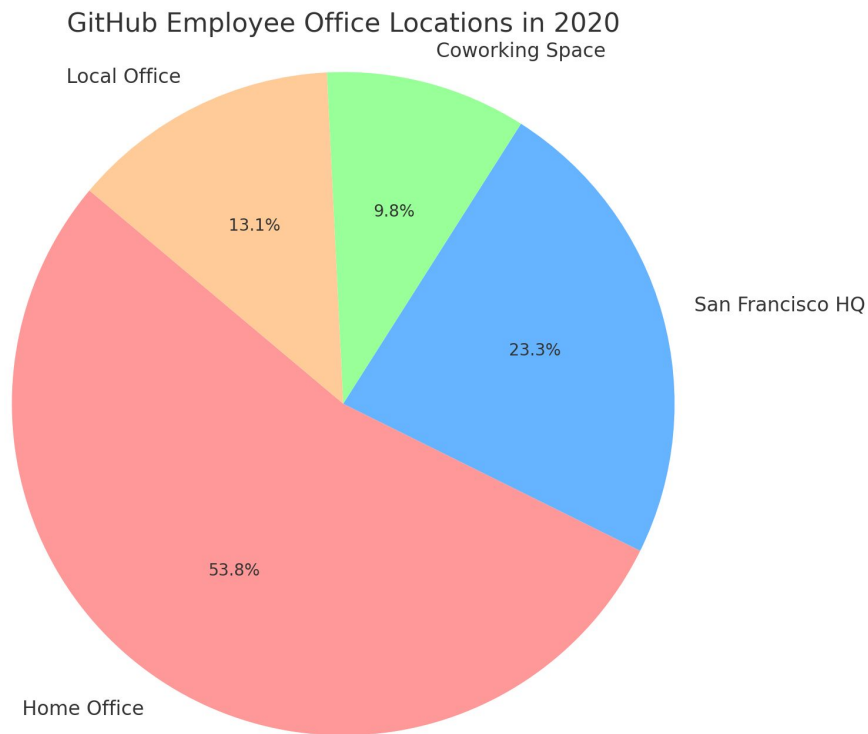
- 趣事

- 除了 PJ 之外, 其他两位创始人都是大学辍学
- 三个人凑了几百美金开始, 在 a16z 投资前, 一直是赢利的
- Preston-Werner 此前做过 Gravatar 并卖给 Automattic
- 在 GitHub 之前, Hyett 和 Wanstrath 考虑做 FamSpam: 允许大家庭之间沟通的邮件列表

- 创始人的话

- We both loved git but there was no acceptable way to share code with others.
- And we're all about getting things done. We're very lucky to be working (mostly) on a web app, which means it's super easy to make changes fast. We've learned it's much better to ship it now and fix it later, once you can see how people are using it, than it is to let it linger in development forever. Just ship it.
- Worry about every dollar you spend before (and even after) you're profitable. Focus on the things that matter and don't waste time endlessly redesigning your site or tinkering with new technologies. There'll be plenty of time for that later.

2020 年 GitHub 员工远程办公情况统计



GitHub 为什么能高速发展

- 解决的问题

- 开发者
 - 大规模远程协作、交流代码的需求
 - 成为开发者对外的名片
- 组织和企业
 - 存储代码的 SaaS 需求

- 抓住的机会

- 踩中了开发者数量爆发增长的二十年 (2011.08 Software is eating the world - Marc Andreessen)
- 在持续增长的市场里, 做了多年有复利的事
- 有可能在 AI 带来的“人人都是开发者”的时代, 进一步增长