



The Road with Open Source

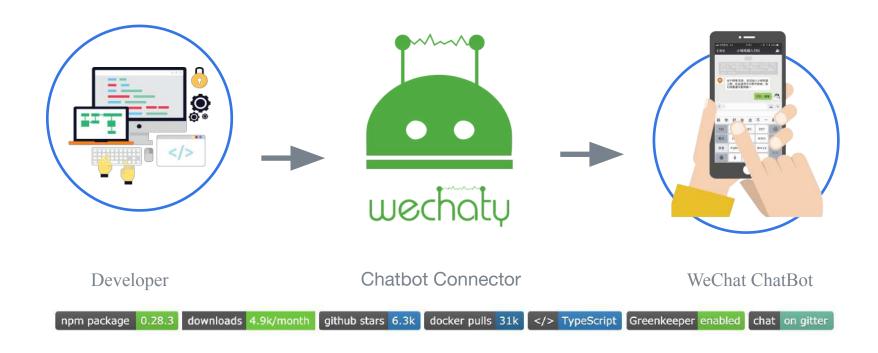


## **What is Wechaty**

## **Connecting Chatbots**



A Conversational RPA SDK for Wechat which can help you create a bot in 6 lines of javascript, with cross-platform support including Linux, Windows, Darwin(OSX/Mac) and Docker.



## Wechaty 是一个帮助你自动化消息处理流程的 RPA 工具



它支持的功能包括:接收消息,发送消息、添加好友、为好友备注、接受好友请求、发起群聊、加人入群等功能。

只需要6行代码, 你就可以 通过个人号 搭建一个 微信机器人功能, 用来自动管理微信消息。

#### 更多功能包括:

- 消息处理:关键词回复
- 群管理:自动入群,拉人,踢人
- 自动处理好友请求
- 智能对话:通过简单配置,即可加入智能对话系统,完成指定任务





## **Wechaty Developers**

## 7,600+ GitHub Stars

2016: 330

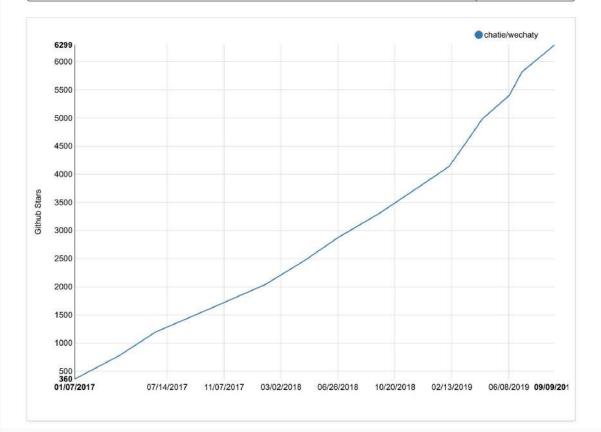
2017: 2,000

2018: 4,000

2019: 6,000+

2020: 7,600+

chatie/wechaty View star history



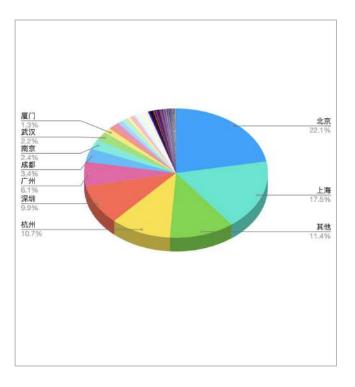
Source: https://star-history.t9t.io/#chatie/wechaty



## Global



## China



## 6,000+ bot developer fans come from Tencent, Google, Microsoft, Alibaba, etc.





1MHz



icodesian Microsoft









Google





阿里巴巴









百度



腾讯



阿里巴巴





ccforward

阿里巴巴

















Microsoft





















百度





























京东

















SOHO







饿了么











京东

Flipboard



Oracle







搜狐



IBM



有赞





























DIYgod 美丽说 Bilibili















Helen Yin

联想



















ColinXL Microsoft





华为





## Contributor: Google, Tencent, ByteDance engineers and entrepreneurs





Gcaufy Author of WePY. Tencent



coderwhocode Founder & CEO of Muggle Pay, Stanford Master



Xinbenly Google Engineer



Simon Liang Ex-Amazon Software Engineer. Founder & CEO of X-Tech



Windmemory Co-founder of JuziBot



Judaschrist Co-founder & CTO of 小理智能



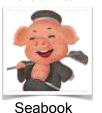
Found of Persper Foundation, Tsinghua PhD, MSRA Researcher



CTO of BotWare



CEO of ChatOpera



Founder of Kungfu Software



zhuangbiaowei

sponsor and president of <u>开源社</u>



Community-platform-architect in HuaweiFounder&CEO of GhostCloud



Greatgeekgrace Ex-Baidu-er, Tensorflow Expert and published a ML book in 2017



Timqian Founder of t9t.io. Building transparent products at t9t.io



Founder & CEO of SteamMemory, ex-CTO of Awesome Port



Li Ming Founder & CEO of Maodou. Tsinghua Master



jijiechen Senior consultant of Red Hat Software Open Innovation Lab



Dcsan Founder & CFO of RIKALL abs from US

















































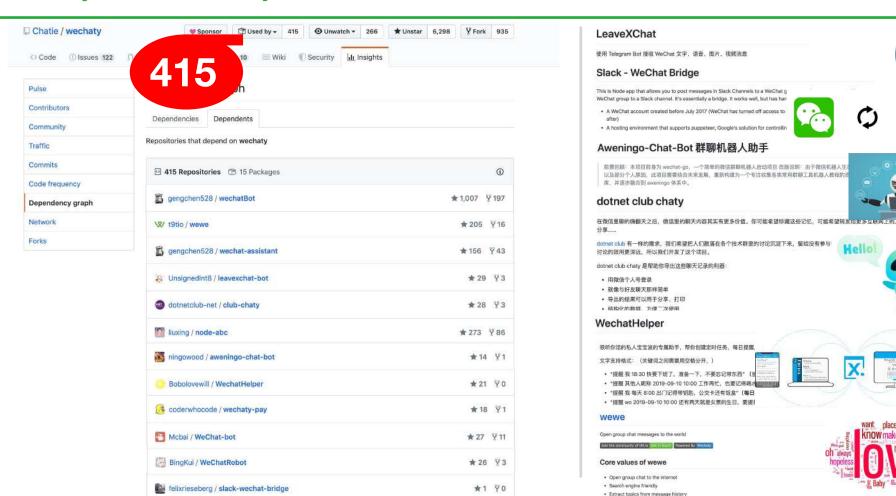






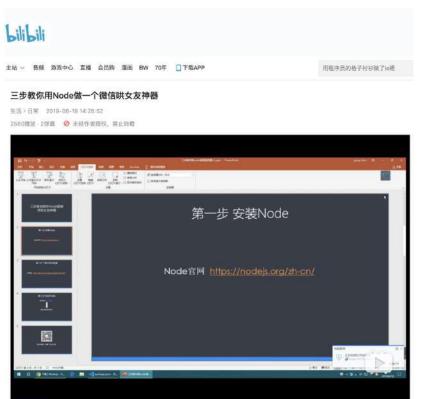
### **Used by hundreds of Projects**

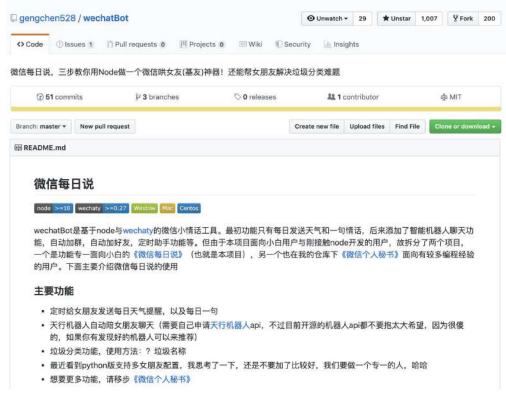




### A Wechaty bot to make girlfriend happy: 1,000+ star







Source: https://www.bilibili.com/video/av56077628

Source: https://github.com/gengchen528/wechatBot

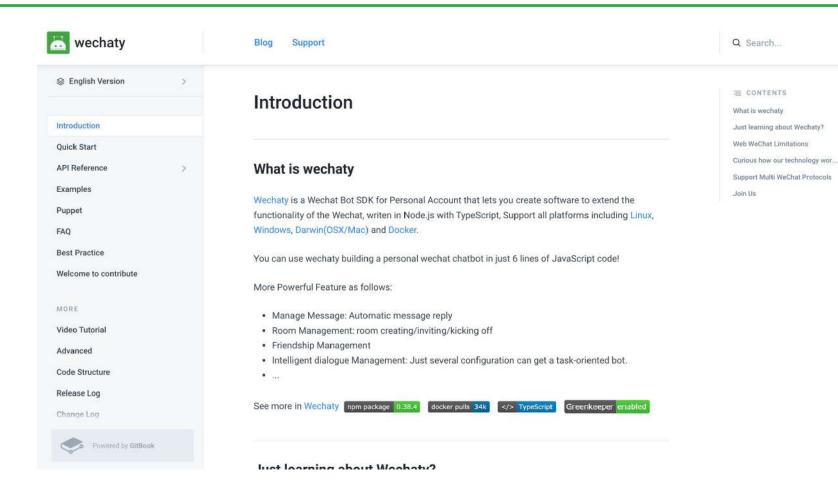
## **Projects Using Wechaty**



- 1. koa+wechatv实现的微信个人秘书, 把你闲置的微信号利用起来做个个人秘书
- 2. 微信每日说,每日自动发送微信消息
- 3. 一个通过深度神经网络CNN给图片评分的wechatv项目
- 4. <u>Use Wechaty to get notifications when you receive new emails</u>
- 5. RoomAnalyze
- 6. Wechaty 群分析统计机器人
- 7. Poker planning for scrum using wechat bot
- 8. help to invite people to a group
- 9. Philly Wechat <=> philly-wechat <=> philly
- 10. Haoshiyou-Bot A chat bot supported on WeChaty, managing the HaoShiYou wechat groups run by volunteers of haoshiyou.org
- 11. A microservice implementation of WeChaty
- 12. Wechaty Telegram Bot Adaptor Run your Telegram bot on WeChat
- 13. Bot Builder Wechaty Connector Connector for UniversalBot from Bot Builder
- 14. <u>命令行版的微信</u>

#### **Document**





## **Hundreds of blog from developers**



Wechaty - Conversational RPA SDK for WeChat

Posts

Categories



#### Wechaty

Bot is not born, but made.

Website

Twitter

GitHub

Recent Posts

#### repe-assistant 社群活动助手

(3) less than 1 minute read

Author: @xiaogan18 Full stack developer, specialized golang and blockchain. Code: @Github

#### Cps demo of wechat bot with wechaty

3 4 minute read

#### Nio bot蔚来车主群服务机器人

(§ 1 minute read

作者: Leons828 web developer Code: Github

#### Chatbot 在定制旅游行业的应用

(I) less than 1 minute read

作者: 李恺, 无二之旅研发总监、资深后端工程师。

#### Posts by Category

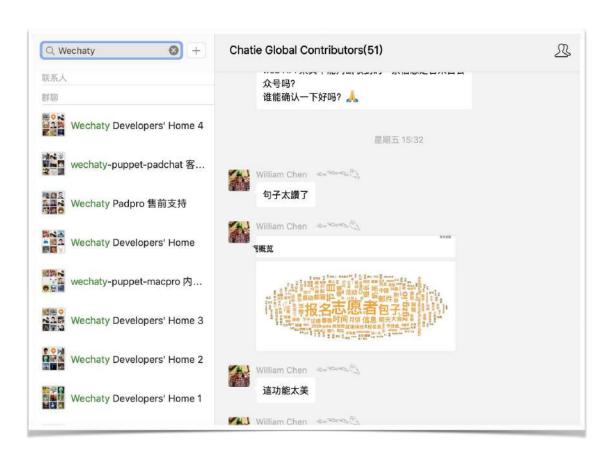
project	19	event	13	tutorial	11
announcement	6	article	6	story	5
feature	4	hack	4	npm	2
migration	2	shop	1		

#### **Posts by Tag**

code	34	meetup	9	talk	8
release	3	interview	2	docker	2
startup	2	api	2	machine learning	2
hook	2	datagirls	2	artificial intelligence	2
bot	2	case	- 1	sticker	1
telegram	1	unofficial	7	document	1
typescript	1	botbuilder	1	sdk	1
windows	1	install	1	heroku	1
deploy	1	analytics	1	contribution	7
open source	1	devops	1	npm	1
saas	1	bot5	7	rasa	1
bot friday	1	dotnetclub	1		

## **5,000 + Wechaty Developers via WeChat**





### **Voice of Developers**



- I ... fall in love with it. It's really easy to get started to make your own wechatbot. link
- -- @kungfu-software, Founder of Kungfu Software
- "Wechaty is a great solution, I believe there would be much more users recognize it." link
- -- @Gcaufy, Tencent Engineer, Author of WePY
- "The best wechat SDK I have seen in Github!" link
- -- @JasLin, BotWave CTO
- "Wechaty简单的接口...和Docker化的封装...绝对是一个不错的选择" link
- -- @shevyan, Ghost Cloud CEO
- "Wechaty is great." link
- -- @Samurais, SnapLingo Director of Engineering
- "最好的微信开发库" link
- -- @Jarvis, Baidu Developer

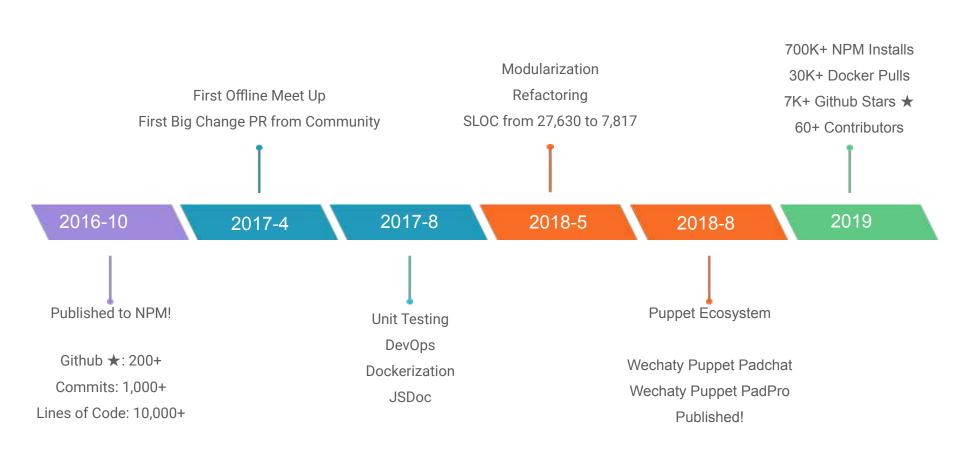
- "Wechaty让运营人员更多的时间思考如何进行活动策划、留存用户,商业变现" link
- -- @lijiarui, Orange Interactive CEO.
- "太好用,好用的想哭"
- -- @xinbenly, Google Engineer, HaoShiYou.org Founder
- "If you know js ... try Chatie/wechaty, it's easy to use."
- -- @Urinx Uri Lee, Author of WeixinBot
- "Wechaty library fantastic!" link @ccaapton
- "it's quite cool!" link @ak5
- "Thanks for great SDK" link @naishstar
- "Your docker solution is awesome!" link @ax4
- "you're using ALL the tools available for CI/CD and all best practice." link @realtebo, Italian



## **Wechaty Architecture**

## **Wechaty Gets Stronger in the Past 4 Years!**











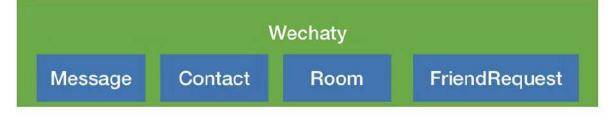












**Connect to ChatBots** 

**Puppet** 

Connect to different implements

Mock

Wechat4u

Puppeteer

Padchat

Padpro

**Different puppet implements** 









# Wechaty DevOps Toolset

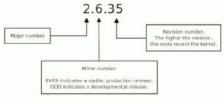
The powerful and easy to use Chatie DevOps Toolset:

- 1. It's Open Source
- 2. It works out-of-the-box
- 3. It improves the developing performance





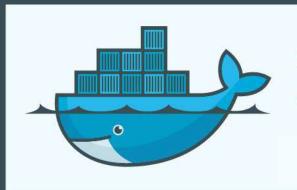








- <u>@chatie/tsconfig</u> Enables other module to inheritance tsconfig.json via
   Node.js packages
- <u>@chatie/eslint-config</u> ESLint Shareable Rules in TypeScript Standard Style
- 3. @chatie/semver The Enhanced Semantic Versioner for NPM
- 4. @chatie/git-scripts: Git Hooks Integration for Chatie Projects
- 5. tstest: A pytest in TypeScript
- 6. pkg-jq: Find the nearest package.json then deal with jq syntax on it. (in-line edit supported!)



## zixia/wechaty







52

452,633

0

\$ docker run zixia/wechaty help

\$ docker run zixia/wechaty demo

Usage: wechaty [ mybot.js | mybot.ts | COMMAND ]

Run a JavaScript/TypeScript <Bot File>, or a <Wechaty Command>.

<Bot File>:

mybot.js: a JavaScript bot. will run by Node.js v7

mybot.ts: a TypeScript bot. will run by ts-node/TypeScript v2

<Commands>:

demo Run Wechaty DEMO doctor Print Diagnose Report

test Run Unit Test

Learn more at:

https://github.com/chatie/wechaty/wiki/Docker

## **Test Automation - CI(Continuous Integration)**

















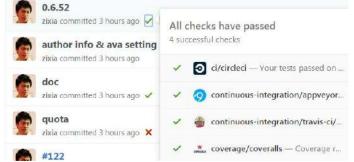






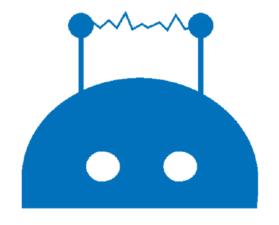






## **DevOps: Git Push is All You Need**





https://www.chatie.io



GitHub https://github.com/chatie/wechaty



docker https://hub.docker.com/r/zixia/wechaty/



https://npmjs.com/package/wechaty













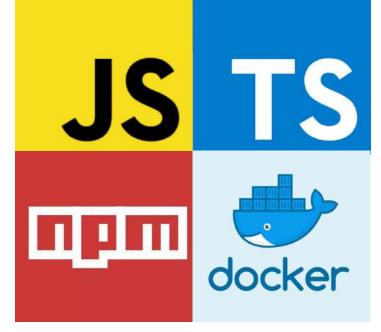


## Basic



Advanced

- JavaScript
- npm
- Github



**TypeScript** 

Docker



## **Wechaty Community Governance**





#### **Contribute Guideline**



#### Why contribute?

As an open source product, Chatie thrives from contributions of community members. Whatever your skill set is, there is a lot you can do to help us make Chatie better! So start forking!

#### Not sure where to start?

It's a myth that writing code is the only way to contribute to open source. Chatle community is open to new ideas and there are so many different ways to make valuable contributions. We have some ideas of how you can get started!

#### 1. Contribute Code

- Check out GitHub issues with the tags good first issue, pull request welcome or help wanted
- · Write code examples for documentation
- · Report a bug and work on resolving it
- · Collaborate with others on building new features

Tips: If you want to add new features or change the API, please submit an issue first to make sure no one else is already working on the same thing and discuss the implementation and API details with maintainers and users by creating an issue. When everything is settled down, you can submit a pull request.

Make sure to add tests for your features and bugfixes and update the documentation (see below) before submitting your code!

#### 2. Contribute Support

- · Fix typos in documentation
- · Translate documentation to your local language
- Write tutorials and blog posts, see more: https://github.com/chatie/blog
- · Answer questions on the Wechaty Developers Home or Github issues
- Organize Chatle meetups or user groups in your area

We put all of the contribute guideline on Github, in order to help the developers to join the community easily, to get a sustained, rapid and sound development

#### **Become a Committer**



#### How Do I Become a Committer?

First of all you need to get involved and be a Contributor.

Based on your track-record as a contributor, one of our Maintainers or PMC members may invite you to be a committer (after we've called a vote). When that happens, if you accept, the following process kicks into place...

Note that becoming a committer is not just about submitting some patches; it's also about helping out on the development and user Discussion Forums, helping with documentation and the issues.

See Become a Committer.md for becoming a committer steps and more details.



Geaufy
Author of WePY
(https://github.com/Tencent/wepy),
a mini program fframework for Wechat. Tencent
Engineer



Windmemory

Co-founder & CTO of JuziBot

Y Combinator W19 Alumni

Ex- Expedia and Ex- Amozon Engineer in

Seattle, US

We introduce how to become a commiter in the doc and their rights and obligations.

#### committer:

- Tencent engineer & wepy author
- CTO of JuziBot

#### Code of Conduct



#### Our Pledge

In the interest of fostering an open and welcoming environment, we as contributors and maintainers pledge to making Project maintainers are responsible for clarifying the standards of acceptable behavior and are expected to take participation in our project and our community a harassment-free experience for everyone, regardless of age, body size, disability, ethnicity, gender identity and expression, level of experience, nationality, personal appearance, race, religion, or sexual identity and orientation.

#### Our Standards

Examples of behavior that contributes to creating a positive environment include:

- Using welcoming and inclusive language
- Being respectful of differing viewpoints and experiences
- · Gracefully accepting constructive criticism
- · Focusing on what is best for the community
- · Showing empathy towards other community members

Examples of unacceptable behavior by participants include:

- · The use of sexualized language or imagery and unwelcome sexual attention or advances
- Trolling, insulting/derogatory comments, and personal or political attacks
- · Public or private harassment
- Publishing others' private information, such as a physical or electronic address, without explicit permission
- · Other conduct which could reasonably be considered inappropriate in a professional setting

#### Our Responsibilities

appropriate and fair corrective action in response to any instances of unacceptable behavior.

Project maintainers have the right and responsibility to remove, edit, or reject comments, commits, code, wiki edits, issues, and other contributions that are not aligned to this Code of Conduct, or to ban temporarily or permanently any contributor for other behaviors that they deem inappropriate, threatening, offensive, or harmful,

#### Scope

This Code of Conduct applies both within project spaces and in public spaces when an individual is representing the project or its community. Examples of representing a project or community include using an official project e-mail address, posting via an official social media account, or acting as an appointed representative at an online or offline event. Representation of a project may be further defined and clarified by project maintainers.

#### Enforcement

Instances of abusive, harassing, or otherwise unacceptable behavior may be reported by contacting the project team at dev@chatie.io. The project team will review and investigate all complaints, and will respond in a way that it deems appropriate to the circumstances. The project team is obligated to maintain confidentiality with regard to the reporter of an incident. Further details of specific enforcement policies may be posted separately.

Project maintainers who do not follow or enforce the Code of Conduct in good faith may face temporary or permanent repercussions as determined by other members of the project's leadership.

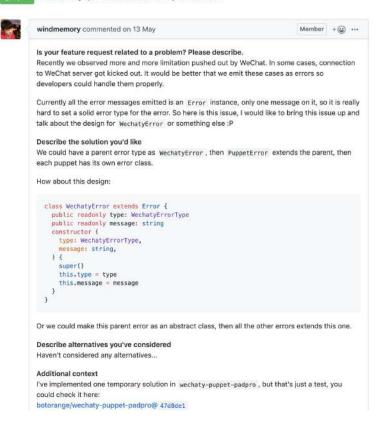
We need the code style of contributor to be uniform and high quality. We chaty provide tools to automatically modify the code style and comment formats to help improve PR quality.

### **RFC - Request For Comments**



#### [RFC] We need a better error system #1776

① Open windmemory opened this issue on 13 May · 2 comments



If a developer request for comments, he should propose a proposal first, describe what he want to do, why he should do this, what benefits it can bring, what the program is and the advantages VS disadvantages of alternatives.

All of the PR will based on the full-discussed proposal to make a good development

## PR template



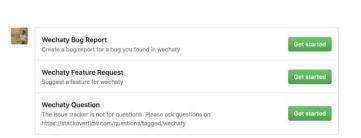


I'm submitting a	
[ ] Bug Fix [ ] Feature [ ] Other (Refactoring, Added tests, Documentation,)	
Checklist	
Commit Messages follow the Conventional Commits pattern  • A feature commit message is prefixed "feat:"  • A bugfix commit message is prefixed "fix:"  Tests for the changes have been added	
Description	
please describe the changes that you are making	
for features, please describe how to use the new feature	
please include a reference to an existing issue, if applicable	
Does this PR introduce a breaking change?	
[] Yes [] No	

Contributors should fill in the PR template in order to explain what will happen after the PR instead of just a mass of code.

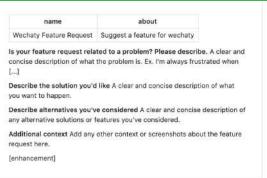
### **Issue Template**





We have 3 issue templates to help developers describe their bug, feature request and questions.





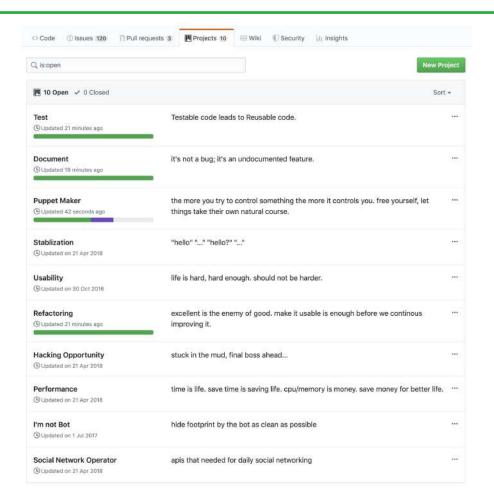
## **Feature Request**



Question

## **Github Project**





Wechaty release plan via Github Project to make developers join us easily

#### Including:

- Big Change
- Issue Plan
- Test Plan
- Document
- Perfomance



## Wechaty Multi Language









https://github.com/wechaty









## Wechaty in Python, Go, and Java Apr 17, 2020

https://github.com/wechaty/python-wechaty

https://github.com/wechaty/go-wechaty

https://github.com/wechaty/java-wechaty



# **Wechaty Community Meetups**

## 10+ Meetups at Beijing, Shanghai, Guangzhou, and United States





Silicon Valley, 2018

Shanghai, 2018

**Beijing**, 2017

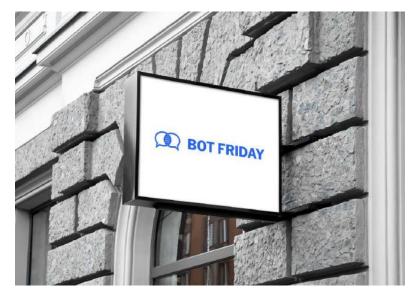


Beijing, 2018

Beijing, 2018

## **Bot Friday Club**





- 19:00 22:00 Chatbot Talk every Friaday
- After Party
- 50 talk each year
- One Chatbot Bootcamp each year all over the world

### **Bot Friday Activities**



《The Bad Part of My Chatbot Experience》
《Face recognition chatbot based on WeChat》

Chatbot Developer	3
Chatbot Product Manager	1
Chatbot Founder	8
Total	12



Bot Friday seminar 2

《Chatbot Design Principle》 《Chatbot getting started》 《Emotional ChatBot》

Chatbot Developer	7
Chatbot Product Manager	3
Chatbot Founder	8
Al investor	1
Total	19



Bot Friday seminar 3

《Bot Framework introduction》 《How to use Microsoft cognitive service build a bot》 《WeChat Adapter for bot framework》

Tencent Chatbot Product Manager	3
Microsoft Chatbot Product Manager	5
Chatbot Founder	4
Chatbot Developer	4
Total	16



Bot Friday seminar 6









Chatbot Trend, Technology, Applications









### 10 + Workshop in Google, Microsoft, Amazon, Tencent





2016.12 重新认识聊天机器人

<u>2018.8 Google 开发者节</u>



2018.1 女生科技体验节

2018. 10 Microsoft Tech Summit

2019.8 Bot Builder Adapter for Wechaty

### Wechaty-getting-started





#### 1. BASIC

Wechaty Basic Functions (demos under the basic/ directory)

FileName	Description	描述
the-worlds-shortest-chatbot- code-in-6-lines.js	The very first wechaty example showcasing how easy it is to get started	
ding-dong-bot.js	Practical example illustrates on how to do message handling	
contact-bot.js	List all contacts by Wechat ID & Name	在终端下输出微信号下所有联系 的人激信ID和昵称。

#### 2. ADVANCED

Wechaty Advanced Functions (demos under the advanced/ directory)

FileName	Description	描述
demo-in-tutorial.js	the demo bot from the tutorial	
busy-bot.js	auto response "busy" message for you when you are	
media-file-bot.js	Save Media Attachment in Message to local files	将消息中的文件、图片、视频等非文本 信息存到本地。
room-bot.js,room- say-cli.js	Practical example illustrates on how to do room handling	
friend-bot.js	Practical example illustrates on how to do friend handling	
gist-bot/	Best template for bigger modules, with each handler in separated files	

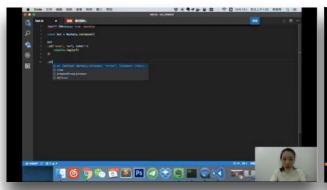
#### 3. PROFESSIONAL

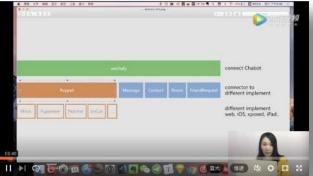
Wechaty Integrated with Other Modules/Services (demos under the professional/ directory)

FileName	Description	描述
hot-import- bot/	Using Hot Module Reload(HMR) for Wechaty Listeners	
ctrl-c-signal- bot.ts	Ctrl-C signal handling demo	
monster-bot/	demo that tried to include everything message, room, HMR & signal handling, with each handler in separated files	
api-ai-bot.ts	Wechaty bot that uses ApiAi.com brain	
speech-to- text-bot.ts	bot that uses baidu speech (vop.baidu.com)	
tuling123- bot.ts	Connect to tuling123 chatbot	接入 tuling123机 器人
telegram- roger-bot.js	single bot that runs under/for both Telegram and WeChaty	
blessed- twins-bot/	Wechaty multi-instance support (v0.16+) demo	

## **Tutorial to make it easy for newcomers**









**Getting Started1** 

**Getting-Started2** 

Wechaty101

## Summary

- 40+ Contributors
- 5,000+ Commits
- 10+ x 400+ Wechat Bot Developer Groups
- 70+ Blog Posts
- 700,000+ NPM Downloads
- 30,000+ Docker Pulls
- 6,000+ Github Stars
- 400+ Github Open Source Repo Dependencies
- 100,000+ Bot Developer Influence
- 1,800+ Issues / Pull Requests



## **Connect ChatBots**

Wechaty is a Conversational RPA SDK for WeChat Individual Account which can help you create a bot in 6 lines of javascript, with cross-platform support including Linux, Windows, Darwin(OSX/Mac) and Docker.





# Thanks!

**Wechaty Github**: https://github.com/wechaty/wechaty



## 李佳芮

Wechaty 作者,《Chatbot 从 0 到 1》作者
Microsoft AI MVP; 句子互动(JuziBot)创始人 & CEO



扫我加我微信