CAP 6635 Artificial Intelligence

ChatGPT Instruction

x. zhu, v0.01

01/23/2023 (this document updates frequently)

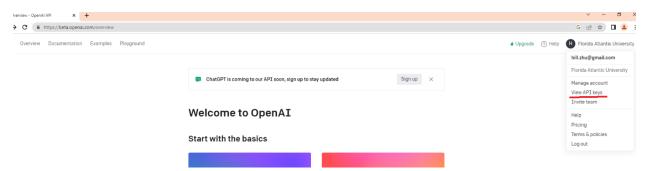
This instruction intends to introduce major steps to install ChatGPT to your computer. We provide two different ways (1) install ChatGPT to your computer as an application, and (2) connect ChatGPT to Jupyter Notebook, so you can programmatically call ChatGPT functions.

Step 1: Create ChatGPT secret key (API keys) for API access.

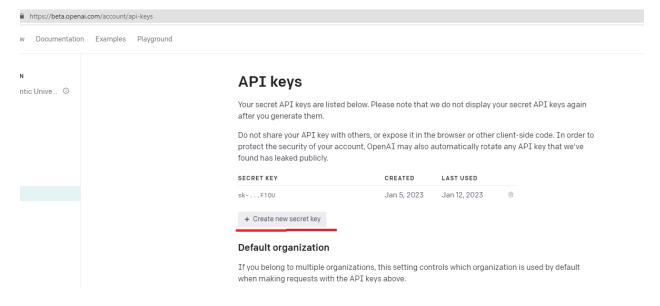
1. Before using ChatGPT API, you need to connect to the opai.com and "sign up", and obtain pass for later usage.

https://openai.com/api/

2. After "sign up", please login in, and then create your API key.



3. If this is your first-time usage, please click "Create new secret key". Your key is a long string of tokens. It will be shown only once to you. Please save your token at a safe place for later usage. If you lose your tokens, you can only create a new one.



4. Later on, we your code access to ChatGPT, it will require API keys, so the system can validate your credentials.

This is how the API keys looks like



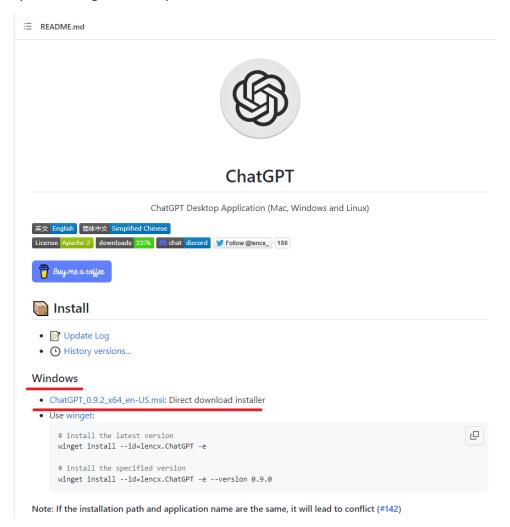
Step 1: ChatGPT Desktop Installation.

One of the most convenient ways of experiencing ChatGPT is to install a desktop version. This allows you to install ChatGPT on your computer as an application, so you can interact with ChatGPT directly.

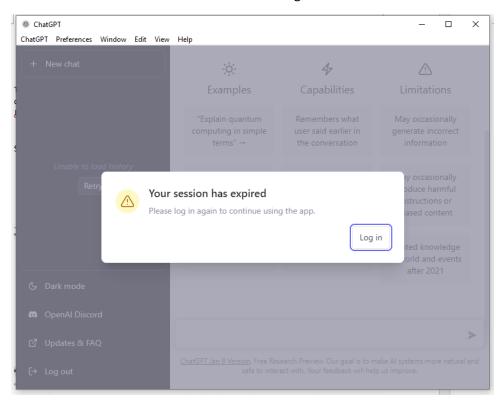
Please refer to the following github for more information. They support Windows, Mac, and Linux systems.

https://github.com/lencx/ChatGPT

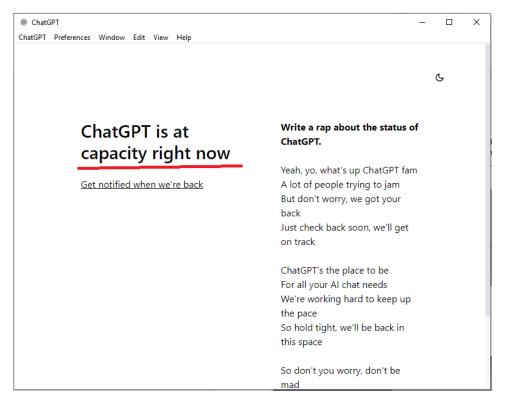
For example, if you are using Windows, you can use their .msi file to install ChatGPT.



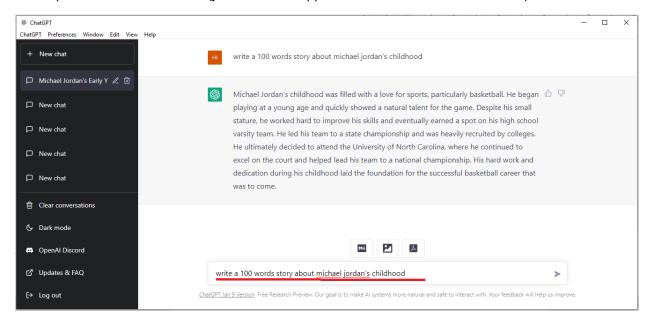
Please note that you will still need to have access to network to use ChatGPT applications, as the system need to communicate with server models during the chat.



In some cases, the ChatGPT system is busy. They may decline your access and show following message.



Once login, you can type questions in the window, they system will generate answers accordingly. You can continuously type questions, and the conversation will continue within the same context. You can also expert conversation results (just check the Application documentation for details).



Step 3: Connect ChatGPT to Jupyter Notebook (option #1)

In order to use ChatGPT in an IDE (so we can access to ChatGPT APIs in a coding environment), we need to connect ChatGPT to jupyter notebook (this is also valid to other python environment).

I am outlining several major steps as follows, please refer to this GitHub for more details.

https://github.com/acheong08/ChatGPT

- 1. Installation, please use "pip3 install --upgrade revChatGPT" to install ChatGPT. Makre sue that your pip3 is up-to-date. If not, use "pip3 install --upgrade pip" to update pip3 first.
- 2. If you are using FAU HPC, following steps below to install the package. Click "new" -> Terminal, and create a terminal window.



3. Type "pip3 install --upgrade --user revChatGPT" in the terminal window to install ChatGPT. (there is no double quote. do not copy and paste, as it may copy inviable characters and result in errors. Just type this command in the terminal).

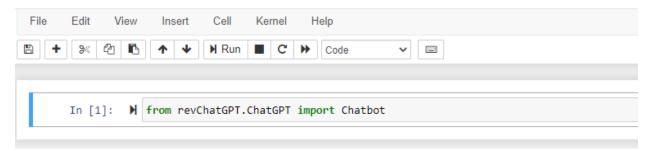
```
[xzhu3@node032 ~]$ pip3 install --upgrade --user revChatGPT
WARNING: pip is being invoked by an old script wrapper. This will fail in a future version of pip.
Please see https://github.com/pypa/pip/issues/5599 for advice on fixing the underlying issue.
To avoid this problem you can invoke Python with '-m pip' instead of running pip directly.

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Collecting revChatGPT
       wnloading revChatGPT-0.2.1-py3-none-any.whl (17 kB)
Collecting tls-client>=0.1.7

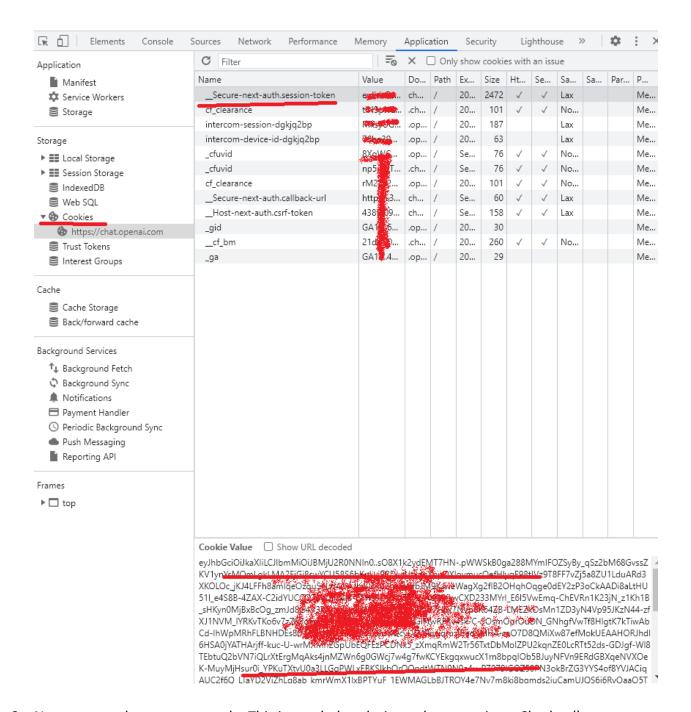
Downloading tls_client-0.1.8-py3-none-any.whl (34.9 MB)
                                                                                                       /s eta 0:00:00
 Collecting undetected-chromedriver>=3.1.7
   Downloading undetected-chromedriver-3.2.1.tar.gz (60 kB)
                                                                                       kB 253.8 kB/s eta 0:00:00
   Preparing metadata (setup.py) ... done
Collecting selenium>=4.7.2

Downloading selenium-4.7.2-py3-none-any.whl (6.3 MB)
Collecting 2captcha-python>=1.1.3
   Downloading 2captcha_python-1.1.3-py3-none-any.whl (8.8 kB)
Requirement already satisfied: requests in /opt/ohpc/pub/apps/python3/3.7.7-jupyterhub/lib/python3.7/site-packages (from 2c aptcha-python>=1.1.3->revChatGPT) (2.23.0)
  ollecting trio~=0.17
Downloading trio-0.22.0-py3-none-any.whl (384 kB)
Collecting certifi>=2021.10.8
  Downloading certifi-2022.12.7-py3-none-any.whl (155 kB)
```

4. If successfully installed, you can run "from revChatGPT.ChatGPT import Chatbot" in the jupyter notebook. It should not throw out any error.



- 5. After installation, you still need to obtain "session token" from your web browser in order to access to ChatGPT. Session token serves as the same role as the API keys. After your access to openAI (e.g., during sign up stage), your web browser will receive a session token. We need to obtain this session token and copy it to the Jupyter Notebook.
 - a. Open a web browser, and type https://chat.openai.com/api/auth/session
 - b. Press F12 key
 - c. Then select "Cookies"
 - d. Then " secure-next-auth.session-token".
 - e. Then copy the long string tokens showing at the bottom of the window. This is your session token. Copy tokens.



Now, paste tokens to your code. This is needed each time when creating a Chatbot()

```
M from revChatGPT.ChatGPT import Chatbot

Chatbot = Chatbot({
    "session_token": "eyJhbGciOiJkaXIiLCJlbmMiOiJBMjU2R0NNIn0..ZoOc9BFRYA_p7HIQ.rR3fswcZHDjojOzS41NAjElk76ajGvDvFvic0IIv_lNAf9p
}, conversation_id=None, parent_id=None) # You can start a custom conversation

response = chatbot.ask("write a story about Tom and Jerry", conversation_id=None, parent_id=None) # You can specify custom co
print(response)
```

7. Please refer to ChatGPTConversations.pdf notebook posted on Canvas for examples of using ChatGPT for continuous conversation.

Note: The above session_token based code was validated using Jupyter notebook installed on my computer. When running code on FAU HPC, the system throws out some errors. I am still debugging and try to figure out errors.

Step 4: Connect ChatGPT to Jupyter Notebook (option #2)

Using session token to access to ChatGPT through Jupyter notebook often encounters difficulties. The system frequently throws out errors that it has reached its limitations. Therefore, another way to access to ChatGPT through jupyter is to use openai function. In this case you will need your openai API key to be ready. You also need to install openai pckage beforehand.

Please refer to the following figure for details. Please also refer to OpenAI Continuous Chat [html, Notebook] for example of using openAI API functions to create continuous conversation.

'Sam and Bob had been friends since they were in elementary school. Growing up in Boca Raton, Florida, they had shared many memories and adventures. Now, they were both in their twenties and had decided to take a road trip to explore the rest of the state. \n\nAfter a few days of driving, they arrived in the city of Orlando. Sam had always wanted to visit the theme park s, so they decided to spend a day exploring the area. Bob was a bit more adventurous and suggested they take a detour to St. Augustine, which was known for its historic sites. \n\nSam and Bob spent the day exploring the old city and taking in the si ghts. They even stopped for lunch at a local seafood restaurant and enjoyed the fresh catch of the day. After a few hours, t hey decided to head back to Boca Raton, but not before stopping at the beach for one final sunset. \n\nAs they watched the s ky turn from orange to pink, Bob said, "It's been great exploring Florida together, but I think it\'s time to head home." S am smiled and said, "Agreed, I can\'t wait to see what other adventures await us in Boca Raton!"