# 作业

♀ Tip

结营必做基础作业;优秀学员或进入对应 SIG 需完成进阶作业。

# 基础作业

- 1. 完成 Lagent Web Demo 使用,并在作业中上传截图。文档可见 Lagent Web Demo
- 2. 完成 AgentLego 直接使用部分,并在作业中上传截图。文档可见 直接使用 AgentLego。

# 进阶作业

- 1. 完成 AgentLego WebUI 使用,并在作业中上传截图。文档可见 AgentLego WebUI。
- 2. 使用 Lagent 或 AgentLego 实现自定义工具并完成调用,并在作业中上传截图。文档可见:
  - 用 Lagent 自定义工具
  - 用 AgentLego 自定义工具

# 大作业选题

# 算法方向

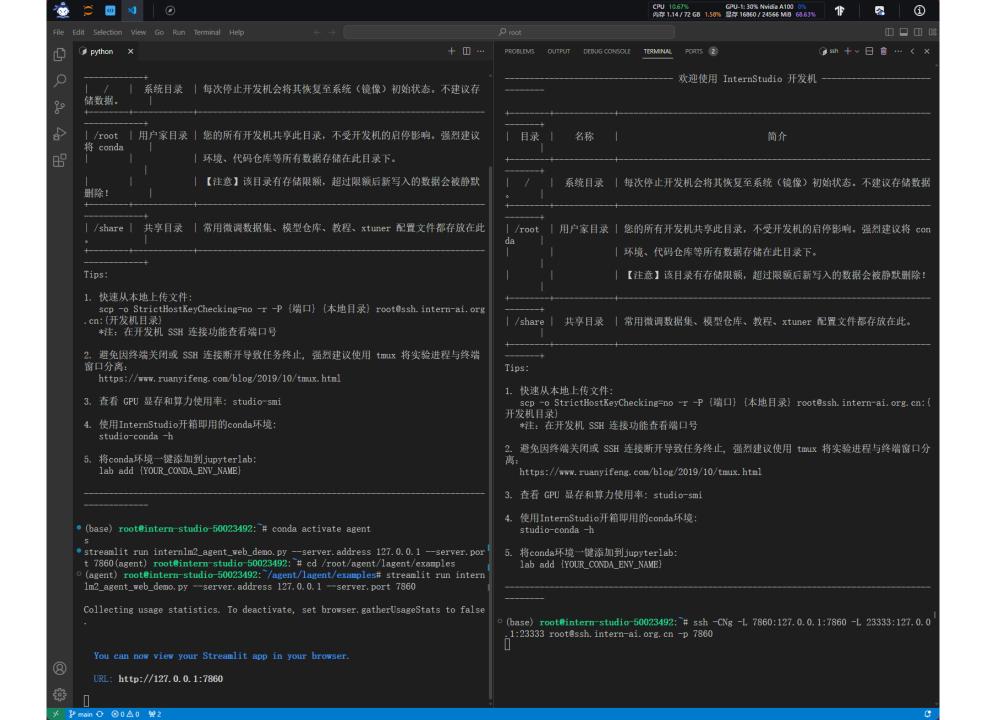
- 1. 在 Lagent 或 AgentLego 中实现 RAG 工具,实现智能体与知识库的交互。
- 2. 基于 Lagent 或 AgentLego 实现工具的多轮调用,完成复杂任务。如:智能体调用翻译工具,再调用搜索工具,最后调用生成工具,完成一个完整的任务。
- 3. ...

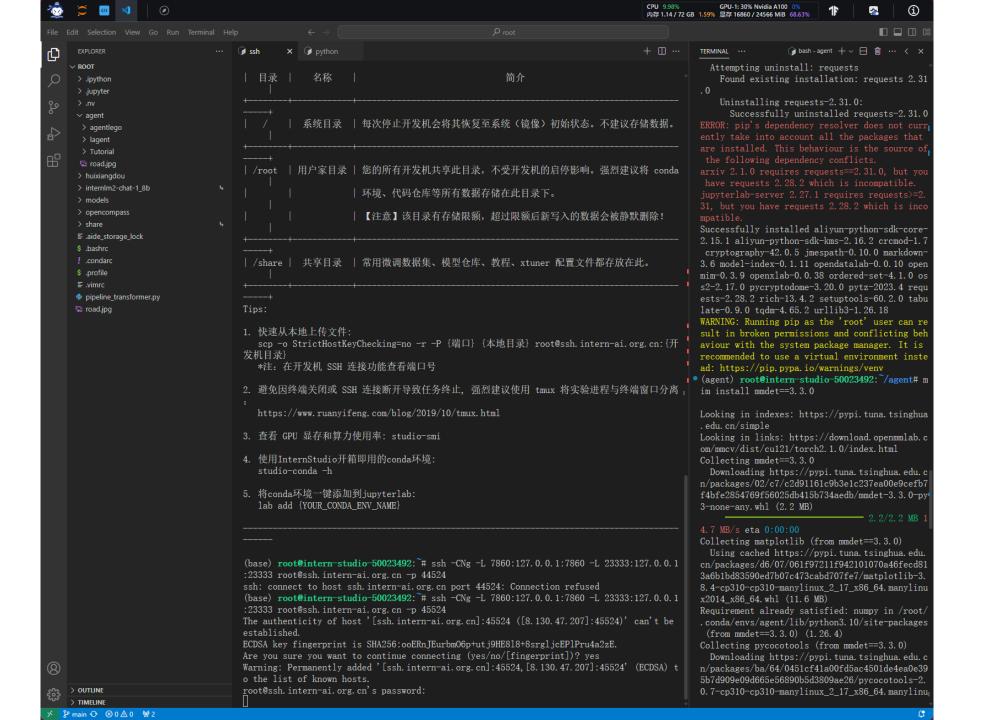
## 应用方向

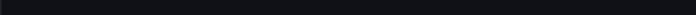
- 1. 基于 Lagent 或 AgentLego 实现一个客服智能体,帮助用户解决问题。
- 2. 基于 Lagent 或 AgentLego 实现一个智能体,实现艺术创作,如生成图片、视频、音乐等。
- 3. ...

GPU-1: 30% Nvidia A100 0% × ~ 内存 0.48 / 72 GB 0.66% 显存 0 / 24566 MiB 0% ollecting ipython>=7.23.1 (from ipykernel) Using cached https://pypi.tuna.tsinghua.edu.cn/packages/8a/15/ea245239487bbd8d7203fe010ea48c7539e42bf1fde0592313241a3fba3a/ipython-8.23.0-py3-none-any.wh1 (814 kB) Collecting jupyter-client>=6.1.12 (from ipykernel) Using cached https://pypi.tuna.tsinghua.edu.cn/packages/75/6d/d7b55b9clac802ab066b3e5015e90faab1fffbbd67a2af498ffc6cc81c97/jupyter client-8.6.1-py3-none-any.wh1 (105 kB) Collecting jupyter-core!=5.0.\*,>=4.12 (from ipykernel) Using cached https://pypi.tuna.tsinghua.edu.cn/packages/c9/fb/108ecd1fe961941959ad0ee4e12ee7b8b1477247f30b1fdfd83ceaf017f0/jupyter\_core-5.7.2-py3-none-any.wh1 (28 kB) Collecting matplotlib-inline>=0.1 (from ipykernel) Using cached https://pypi.tuna.tsinghua.edu.cn/packages/8f/8e/9ad090d3553c280a8060fbf6e24dc1c0c29704ee7d1c372f0c174aa59285/matplot1ib\_inline-0.1.7-py3-none-any.wh1 (9.9 kB) Collecting nest-asyncio (from ipykernel) Using 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https://pypi.tuna.tsinghua.edu.cn/packages/9f/12/11d0a757bb67278d3380d41955ae98527d5ad18330b2edbdc8de222b569b/tornado-6.4-cp38-abi3-manylinux\_2\_5\_x86\_64.manylinux1\_x86\_64.manylinux\_2\_17 x86\_64. manylinux2014\_x86\_64. wh1 (435 kB) Collecting traitlets>=5.4.0 (from ipykernel) Using cached https://pypi.tuna.tsinghua.edu.cn/packages/00/c0/8f5d070730d7836adc9c9b6408dec68c6ced86b304a9b26a14df072a6e8c/traitlets-5.14.3-py3-none-any.wh1 (85 kB) Collecting decorator (from ipython>=7.23.1->ipykernel) Using cached https://pypi.tuna.tsinghua.edu.cn/packages/d5/50/83c593b07763e1161326b3b8c6686f0f4b0f24d5526546bee538c89837d6/decorator-5.1.1-py3-none-any.wh1 (9.1 kB) Collecting jedi>=0.16 (from ipython>=7.23.1->ipykernel) Using cached https://pypi.tuna.tsinghua.edu.cn/packages/20/9f/bc63f0f0737ad7a60800bfd472a4836661adae21f9c2535f3957b1e54ceb/jedi-0.19.1-py2.py3-none-any.whl (1.6 MB) Collecting prompt-toolkit<3.1.0, >=3.0.41 (from ipython>=7.23.1->ipykernel) Using cached https://pypi.tuna.tsinghua.edu.cn/packages/ee/fd/ca7bf3869e7caa7a037e23078539467b433a4e01eebd93f77180ab927766/prompt\_toolkit-3.0.43-py3-none-any.whl (386 kB) Collecting pygments>=2.4.0 (from ipython>=7.23.1->ipykernel) Using cached https://pypi.tuna.tsinghua.edu.cn/packages/97/9c/372fef8377a6e340b1704768d20daaded98bf13282b5327beb2e2fe2c7ef/pygments-2.17.2-py3-none-anv.whl (1.2 MB) Collecting stack-data (from ipython>=7.23.1->ipykernel) Using cached https://pvpi.tuna.tsinghua.edu.cn/packages/f1/7b/celeafafla76852e2ec9b22edecfldaa58175c090266e9f6c64afcd8ld91/stack\_data-0.6.3-pv3-none-anv.wh1 (24 kB) ollecting exceptiongroup (from ipython>=7.23.1->ipykernel) Using cached https://pvpi.tuna.tsinghua.edu.cn/packages/01/90/79fe92dd413a9cab314ef5c591b5aa9b9ba787ae4cadab75055b0ae00b33/exceptiongroup-1, 2, 1-pv3-none-any, whl (16 kB) equirement already satisfied: typing-extensions in ./.conda/envs/agent/lib/python3.10/site-packages (from ipython>=7.23.1->ipykerne1) (4.9.0) Collecting pexpect>4.3 (from ipython>=7.23.1->ipykernel) Using cached https://pypi.tuna.tsinghua.edu.cn/packages/9e/c3/059298687310d527a58bb01f3b1965787ee3b40dce76752eda8b44e9a2c5/pexpect-4.9.0-py2.py3-none-any.wh1 (63 kB) Collecting python-dateuti1>=2.8.2 (from jupyter-client>=6.1.12->ipykernel) Using cached https://pypi.tuna.tsinghua.edu.cn/packages/ec/57/56b9bcc3c9c6a792fcbaf139543cee77261f3651ca9da0c93f5c1221264b/python dateuti1-2.9.0.post0-py2.py3-none-any.wh1 (229 kB) Collecting platformdirs>=2.5 (from jupyter-core!=5.0.\*,>=4.12->ipykernel) Using cached https://pypi.tuna.tsinghua.edu.cn/packages/b0/15/1691fa5aaddc0c4ea4901c26f6137c29d5f6673596fe960a0340e8c308e1/platformdirs-4.2.1-py3-none-any.whl (17 kB) Collecting parso<0.9.0,>=0.8.3 (from jedi>=0.16->ipython>=7.23.1->ipykerne1) Using cached https://pvpi.tuna.tsinghua.edu.cn/packages/c6/ac/dac4a63f978e4dcb3c6d3a78c4d8e0192a113d288502a1216950c4lb1027/parso-0.8.4-pv2.pv3-none-anv.whl (103 kB) Collecting ptyprocess>=0.5 (from pexpect>4.3->ipython>=7.23.1->ipykernel) Downloading https://pypi.tuma.tsinghua.edu.cn/packages/22/a6/858897256d0deac81a172289110f31629fc4cee19b6f01283303e18c8db3/ptyprocess-0.7.0-py2.py3-none-any.whl (13 kB) ollecting wcwidth (from prompt-toolkit<3.1.0,>=3.0.41->ipython>=7.23.1->ipykernel) Using cached https://pypi.tuna.tsinghua.edu.cn/packages/fd/84/fd2ba7aafacbad3c4201d395674fc6348826569da3c0937e75505ead3528/wcwidth-0.2.13-py2.py3-none-any.wh1 (34 kB) ollecting six>=1.5 (from python-dateutil>=2.8.2->jupyter-client>=6.1.12->ipykernel) Using cached https://pppl.tuna.tsinghua.edu.cn/packages/d9/5a/e7c3ladbe875f2abbb9lbd84cf2dc52d792b5a01506781dbcf25c9ldaf11/six-1.16.0-py2.py3-none-any.wh1 (11 kB) Collecting executing>=1.2.0 (from stack-data->ipython>=7.23.1->ipykernel) Using cached https://pypi.tuna.tsinghua.edu.cn/packages/80/03/6ea8b1b2a5ab40a7a60dc464d3daa7aa546e0a74d74a9f8ff551ea7905db/executing-2.0.1-py2.py3-none-any.wh1 (24 kB) Collecting asttokens>=2.1.0 (from stack-data->ipython>=7.23.1->ipykernel) Using cached https://pypi.tuna.tsinghua.edu.cn/packages/45/86/4736ac618d82a20d87d2f92ae19441ebc7ac9e7a581d7e58bbe79233b24a/asttokens-2.4.1-py2.py3-none-any.wh1 (27 kB) Collecting pure-eval (from stack-data->ipython>=7.23.1->ipykernel) Using cached https://pypi.tuna.tsinghua.edu.cn/packages/2b/27/77f9d5684e6bce929f5cfe18d6cfbe5133013c06cb2fbf5933670e60761d/pure\_eval-0.2.2-py3-none-any.whl (11 kB) Installing collected packages: wcwidth, pure-eval, ptyprocess, traitlets, tornado, six, pyzmq, pygments, psutil, prompt-toolkit, platformdirs, pexpect, parso, packaging, nest-asyncio, executing, except iongroup, decorator, debugpy, python-dateutil, matplotlib-inline, jupyter-core, jedi, comm, asttokens, stack-data, jupyter-client, ipython, ipykernel Successfully installed asttokens-2.4.1 comm-0.2.2 debugpy-1.8.1 decorator-5.1.1 exceptiongroup-1.2.1 executing-2.0.1 ipykernel-6.29.4 ipython-8.23.0 jedi-0.19.1 jupyter-client-8.6.1 jupyter-core-5.7.2 matplotlib-inline-0.1.7 nest-asyncio-1.6.0 packaging-24.0 parso-0.8.4 pexpect-4.9.0 platformdirs-4.2.1 prompt-toolkit-3.0.43 psutil-5.9.8 ptyprocess-0.7.0 pure-eval-0.2.2 pygments-2.17.2 python-dateuti -2.9.0.post0 pyzmq-26.0.2 six-1.16.0 stack-data-0.6.3 tornado-6.4 trait1ets-5.14.3 wcwidth-0.2.13 G: Running pip as the 'root' user can result in broken permissions and conflicting behaviour with the system package manager. It is recommended to use a virtual environment instead: https://pip nstalled kernelspec agent in /root/.local/share/jupyter/kernels/agent onda环境:agent安测 ALL DONE! \_\_\_\_\_\_

(base) root@intern-studio-50023492:~# [







### 模型名称:

internlm2-chat-7b

### 系统提示词

当开启工具以及代码时,根据需求 选择合适的工具进行调用

### 数据分析提示词

你现在已经能够在一个有状态的 Jupyter 笔记本环境中运行 Python 代码。当你向 python 发送含有 Python 代码的消息时,它将在该环

#### 插件提示词

你可以使用如下工具: {prompt} 如果你已经获得足够信息,请直接 给出答案,避免不必要的工具调用!

### 模型IP:

10.140.0.220:23333

## 插件选择



ArxivSearch

□ 数据分析

上传文件

Drag and drop file here

Limit 200MB per file

Browse files

# Lagent Web Demo



请帮我搜索 InternLM2 Technical Report

TypeError: string indices must be integers

#### Traceback:

```
File "/root/.conda/envs/agent/lib/python3.10/site-packages/streamlit/runtime/scriptrunner/script_runner.py", line 584, in _run_s
    exec(code, module.__dict__)
File "/root/agent/lagent/examples/internlm2_agent_web_demo.py", line 333, in <module>
    main()
File "/root/agent/lagent/examples/internlm2_agent_web_demo.py", line 286, in main
    for agent_return in st.session_state['chatbot'].stream_chat(
File "/root/agent/lagent/lagent/agents/internlm2_agent.py", line 287, in stream_chat
    for model_state, res, _ in self._llm.stream_chat(prompt, **kwargs):
File "/root/agent/lagent/lagent/llms/lmdepoly_wrapper.py", line 422, in stream_chat
    resp += text['choices'][0]['text']
```

>



:

>

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#### 模型IP:

127.0.0.1:23333

#### 插件选择

ArxivSearch



□ 数据分析

清空对话

### 上传文件

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Limit 200MB per fil

Browse files

# **E** Lagent Web Demo



请帮我搜索 InternLM2 Technical Report

```
{
    "name": "ArxivSearch",
    "parameters": {
        "query": "InternLM2 Technical Report"
    }
}
```

{"content": "Published: 2024-03-26\nTitle: InternLM2 Technical Report\nAuthors: Zheng Cai, Maosong Cao, Haojiong Chen, Kai Chen, Key

以下是关于"InternLM2 Technical Report"的搜索结果:\n\n1. 标题: InternLM2 Technical Report\n 作者: Zheng Cai, Maosong Cao, Haojiong Chen, Kai Chen, Keyu Chen, Xin Chen, Xun Chen, Zehui Chen, Zhi Chen, Pei Chu, Xiaoyi Dong, Haodong Duan, Qi Fan, Zhaoye Fei, Yang Gao, Jiaye Ge, Chenya Gu, Yuzhe Gu, Tao Gui, Aijia Guo, Qipeng Guo, Conghui He, Yingfan Hu, Ting Huang, Tao Jiang, Penglong Jiao, Zhenjiang Jin, Zhikai Lei, Jiaxing Li, Jingwen Li, Linyang Li, Shuaibin Li, Wei Li, Yining Li, Hongwei Liu, Jiangning Liu, Jiawei Hong, Kaiwen Liu, Kuikun Liu, Xiaoran Liu, Chengqi Lv, Haijun Lv, Kai Lv, Li Ma, Runyuan Ma, Zerun Ma, Wenchang Ning, Linke Ouyang, Jiantao Qiu, Yuan Qu, Fukai Shang, Yunfan Shao, Demin Song, Zifan Song, Zhihao Sui, Peng Sun, Yu Sun, Huanze Tang, Bin Wang, Guoteng Wang, Jiaqi Wang, Jiayu Wang, Rui Wang, Yudong Wang, Ziyi Wang, Xingjian Wei, Qizhen Weng, Fan Wu, Yingtong Xiong, Chao Xu, Ruiliang Xu, Hang Yan, Yirong Yan, Xiaogui Yang, Haochen Ye, Huaiyuan Ying, Jia Yu, Jing Yu, Yuhang Zang, Chuyu Zhang, Li Zhang, Pan Zhang, Peng Zhang, Ruijie Zhang, Shuo Zhang, Songyang Zhang, Wenjian Zhang, Wenwei Zhang, Xingcheng Zhang, Xinyue Zhang, Hui Zhao, Qian Zhao, Xiaomeng Zhao, Fengzhe Zhou, Zaida Zhou, Jingming Zhuo, Yicheng Zou, Xipeng Qiu, Yu Qiao, Dahua Lin\n 摘要:该报告介绍了InternLM2, 一种开源的大型语言模型,它在多个方面和基准测试中表现出色。该模型采用了创新的预训练和优化技术,并详细介绍了其预训练过程。InternLM2还采用了Supervised Fine-Tuning和一种名为COOL RLHF的新型强化学习技术,以解决人类偏好和奖励作弊问题。该报告还提供了不同训练阶段和模型大小的InternLM2模型,以供社区参考。\n\n2. 标题: Cumulative Reports of the SoNDe Project July 2017\n 作者: Sebastian Jaksch, Ralf Engels, Günter Kemmerling, Codin Gheorghe, Philip Pahlsson, Sylvain Désert, Frederic Ott\n 摘要:该报告是SoNDe探测器项目截至2017年7月的累积报告。报告内容包括:\n-1x1模块技术演示器的报告\n-2x2模块技术演示器测试结果的报告\n-2x2模块技术演示器测试结果的报告\n\n3. 标题:Banach Couples. I. Elementary Theory\n 作者: Jaak Peetre, Per Nilsson\n 摘要:该报告是Jaak Peetre的"Banach Couples. I. Elementary Theory"的精确副本,是初于1971年在日勒(Lund)作为技术报告发布。报告中还添加了更多是近的一般参考资料,并对一些参考资料进行了更新。\n\n和希望这些信息对您有所帮助!

