

Meta Llama / Llama 3.1 405B Instruct

accounts/fireworks/models/llama-v3p1-405b-instruct 

Serverless

LLM

Tunable

Chat

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The Meta Llama 3.1 collection of multilingual large language models (LLMs) is a collection of pretrained and instruction tuned generative models in 8B, 70B and 405B sizes. The Llama 3.1 instruction tuned text only models (8B, 70B, 405B) are optimized for multilingual dialogue use cases and outperform many of the available open source and closed chat models on common industry benchmarks. 405B model is the most capable from the Llama 3.1 family. This model is served in FP8 closely matching reference implementation.

Serverless API

Llama 3.1 405B Instruct is available via Fireworks' serverless API, where you pay per token. There are several ways to call the Fireworks API, including Fireworks' Python client, the REST API, or OpenAI's Python client.

See below for easy generation of calls and a description of the raw REST API for making API requests. See the [Querying text models](#) docs for details.

Try it

API Examples

Generate a model response using the chat endpoint of **llama-v3p1-405b-instruct**.

[API reference](#)

[Python](#) [Typescript](#) [Java](#) [Go](#) [Shell](#) [Chat Completion](#)

```
import requests
import json

url = "https://api.fireworks.ai/inference/v1/chat/completions"
payload = {
    "model": "accounts/fireworks/models/llama-v3p1-405b-instruct",
    "max_tokens": 16384,
    "top_p": 1,
    "top_k": 40,
    "presence_penalty": 0,
    "frequency_penalty": 0,
    "temperature": 0.6,
    "messages": [
        {
            "role": "user",
            "content": "Hello, how are you?"
        }
    ]
}
headers = {
    "Accept": "application/json",
    "Content-Type": "application/json",
    "Authorization": "Bearer <API_KEY>"
}
requests.request("POST", url, headers=headers, data=json.dumps(payload))
```

Fine-tuning

Llama 3.1 405B Instruct can be fine-tuned on your data to create a model with better response quality. Fireworks uses low-rank adaptation (LoRA) to train a model that can be served efficiently at inference time.

See the [Fine-tuning](#)  guide for details.

Fine-tune this model


On-demand deployments

On-demand deployments allow you to use **Llama 3.1 405B Instruct** on dedicated GPUs with Fireworks' high-performance serving stack with high reliability and no rate limits.

See the [On-demand deployments](#) guide for details.

Deploy this Base model

 [Open in model playground](#)

 [Finetune this model](#)

 [Deploy this model](#)

Model Details

Created by	dzhulgakov@fireworks.ai
Created	7/19/2024
Visibility	Public
Kind	Base model
Model size	410B parameters
Fine-tuning	Supported
Serverless LoRA Deployment	Not supported
Function Calling	Supported
Provider	Meta Llama
Hugging Face	Visit link