

# DeepSeek AI / DeepSeek R1

accounts/fireworks/models/deepseek-r1 

Serverless

LLM

Tunable

Chat


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DeepSeek-R1 is a state-of-the-art large language model optimized with reinforcement learning and cold-start data for exceptional reasoning, math, and code performance. The model is identical to the one uploaded by DeepSeek on HuggingFace.


## Serverless API

**DeepSeek R1** 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 **deepseek-r1**. [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/deepseek-r1",
    "max_tokens": 20480,
    "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

**DeepSeek R1** 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 **DeepSeek R1** 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

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 [Finetune this model](#)

 [Deploy this model](#)

## Model Details

Created by	dzhulgakov@fireworks.ai
Created	1/20/2025
Visibility	Public
Kind	Base model
Model size	685B parameters
Fine-tuning	Supported
Serverless LoRA Deployment	Not supported
Function Calling	Not supported
Provider	DeepSeek AI

Hugging Face

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