



Omnis Developer Conference

Boost Your Apps with AI

**How Artificial Intelligence Can
Elevate Your Omnis Applications**

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Inhalt

Boost Your Apps with AI

- AI Interfaces (APIs)
- Omnis Studio Integrated AI Classes
- Custom AI Integration

AI Interfaces (APIs)

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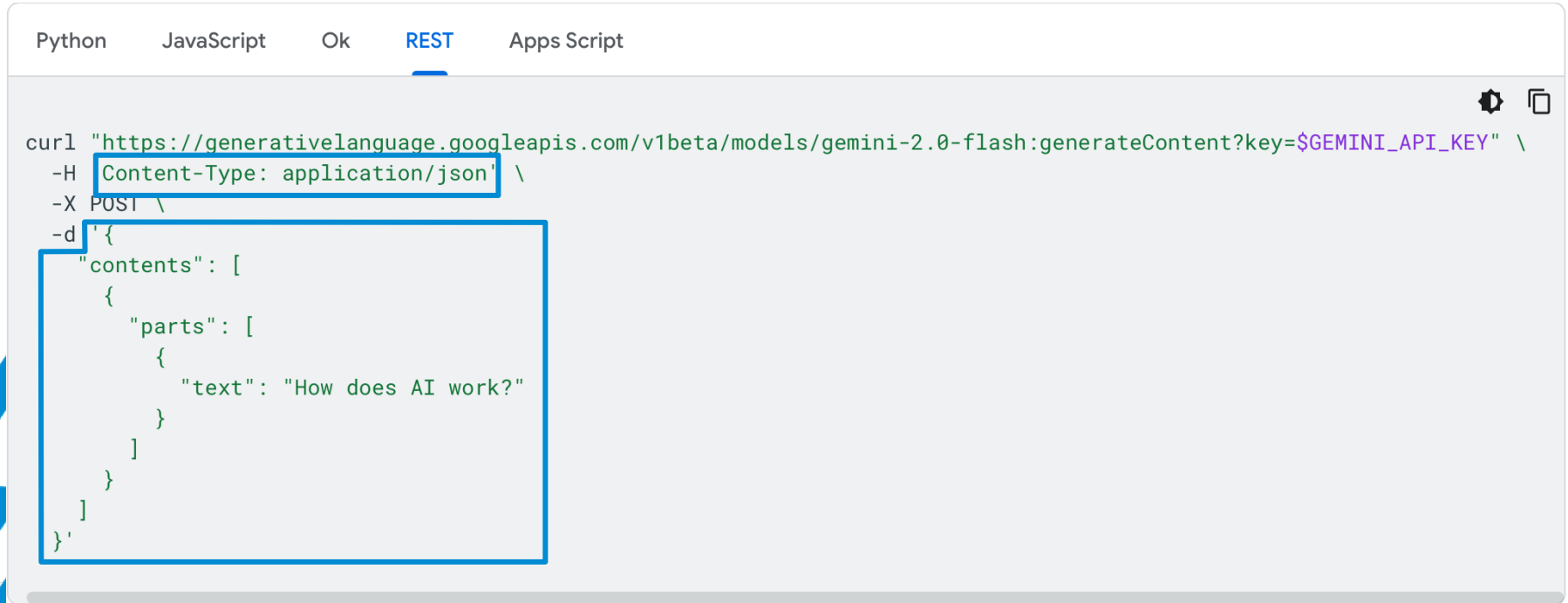
AI Interfaces (APIs)

- HTTP interfaces (usually)
- Most offer packages for Python and JavaScript
- Structured output
- Documentation



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AI Interfaces (APIs)



The image shows a REST client interface with tabs for Python, JavaScript, Ok, REST, and Apps Script. The REST tab is selected. The cURL command is as follows:

```
curl "https://generativelanguage.googleapis.com/v1beta/models/gemini-2.0-flash:generateContent?key=$GEMINI_API_KEY" \
-H 'Content-Type: application/json' \
-X POST \
-d '{
  "contents": [
    {
      "parts": [
        {
          "text": "How does AI work?"
        }
      ]
    }
  ]
}'
```

Blue boxes highlight the `-H 'Content-Type: application/json'` header and the `-d` JSON body in the cURL command.

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AI Interfaces (APIs)

bash

```
curl https://api.x.ai/v1/chat/completions \  
-H "Content-Type: application/json" \  
-H "Authorization: Bearer $XAI_API_KEY" \  
-d '{  
  "messages": [  
    {  
      "role": "system",  
      "content": "You are Grok, a highly intelligent, helpful AI assistant."  
    },  
    {  
      "role": "user",  
      "content": "What is the meaning of life, the universe, and everything?"  
    }  
  ],  
  "model": "grok-3-beta",  
  "stream": false,  
  "temperature": 0  
}'
```



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AI Interfaces (APIs)

Generate text from a model

curl ↕



```
1 curl "https://api.openai.com/v1/chat/completions" \  
2   -H "Content-Type: application/json" \  
3   -H "Authorization: Bearer $OPENAI_API_KEY" \  
4   -d '{  
5       "model": "gpt-4.1",  
6       "messages": [  
7           {  
8               "role": "user",  
9               "content": "Write a one-sentence bedtime story about a unicorn."  
10          }  
11      ]  
12  }'
```


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AI Interfaces (APIs)

Shell

```
curl https://api.anthropic.com/v1/messages \
  --header "x-api-key: $ANTHROPIC_API_KEY" \
  --header "anthropic-version: 2023-06-01" \
  --header "content-type: application/json" \
  --data \
  '{
    "model": "claude-3-7-sonnet-20250219",
    "max_tokens": 1024,
    "messages": [
      {"role": "user", "content": "Hello, world"}
    ]
  }'
```

Omnis Studio integrated AI Classes

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Integrated AI Classes

- HUB > Samples > HTTP AI (omnisai)
- oAnthropicWorker
- oGeminiWorker
- oOpenAIWorker



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Integrated AI Classes

- Create a object reference to the choosen omniscii class
 - *Pass the ai model*
 - *And the api key*
- Call \$runprompt with desired instructions
 - *pSystemInstruction*
 - *pPrompt*
 - *pCallingInst*
 - *pImageUrl*



**„But I really need
something special ...“**

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But I Need: Image Generation

```
Python  JavaScript  Ok  REST

curl -s -X POST \
  "https://generativelanguage.googleapis.com/v1beta/models/gemini-2.0-flash-preview-image-generation:generateContent?key=$GEMINI_API_KEY" \
  -H "Content-Type: application/json" \
  -d '{
    "contents": [{
      "parts": [
        {"text": "Hi, can you create a 3d rendered image of a pig with wings and a top hat flying over a happy futuristic scifi city with lots of greenery?"}
      ]
    }],
    "generationConfig":{"responseModalities":["TEXT","IMAGE"]}
  }' \
  | grep -o '"data": "[^"]*"' \
  | cut -d'"' -f4 \
  | base64
```



Hinweis: Die Bildgenerierung ist möglicherweise nicht in allen Regionen und Ländern verfügbar. Weitere Informationen finden Sie auf der Seite [Modelle](#).

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But I Need: Structured Outputs

```
Python  JavaScript  Ok  REST

curl "https://generativelanguage.googleapis.com/v1beta/models/gemini-2.0-flash:generateContent?key=$GOOGLE_API_KEY" \
-H 'Content-Type: application/json' \
-d '{
  "contents": [{
    "parts": [
      { "text": "List a few popular cookie recipes, and include the amounts of ingredients." }
    ]
  }],
  "generationConfig": {
    "responseMimeType": "application/json",
    "responseSchema": {
      "type": "ARRAY",
      "items": {
        "type": "OBJECT",
        "properties": {
          "recipeName": { "type": "STRING" },
          "ingredients": {
            "type": "ARRAY",
            "items": { "type": "STRING" }
          }
        }
      },
      "propertyOrdering": ["recipeName", "ingredients"]
    }
  }
}' 2> /dev/null | head
```

Custom AI Integration

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Custom AI Integration

- API call with OW3 HTTPClientWorker
- JS / Python module call with JAVASCRIPTWorker / PYTHON Worker
 - *Could require npm installs*



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Custom AI Integration: OW3 HTTPClientWorker

- Create correct JSON structure
 - *Using text statements / strings*
 - *Structure-giving variables (lists and rows)*
- Initialize OW3 HTTPClientWorker (\$init) and call \$run/\$start
- Catch, check and destructure the result





Many thanks for your attention