

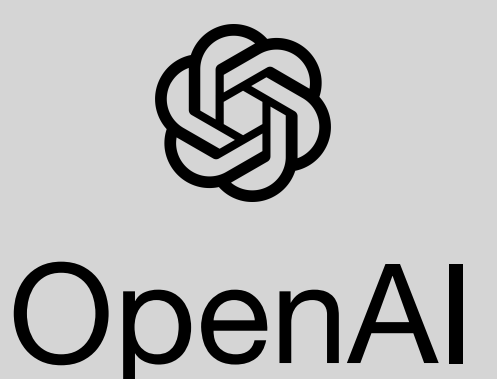


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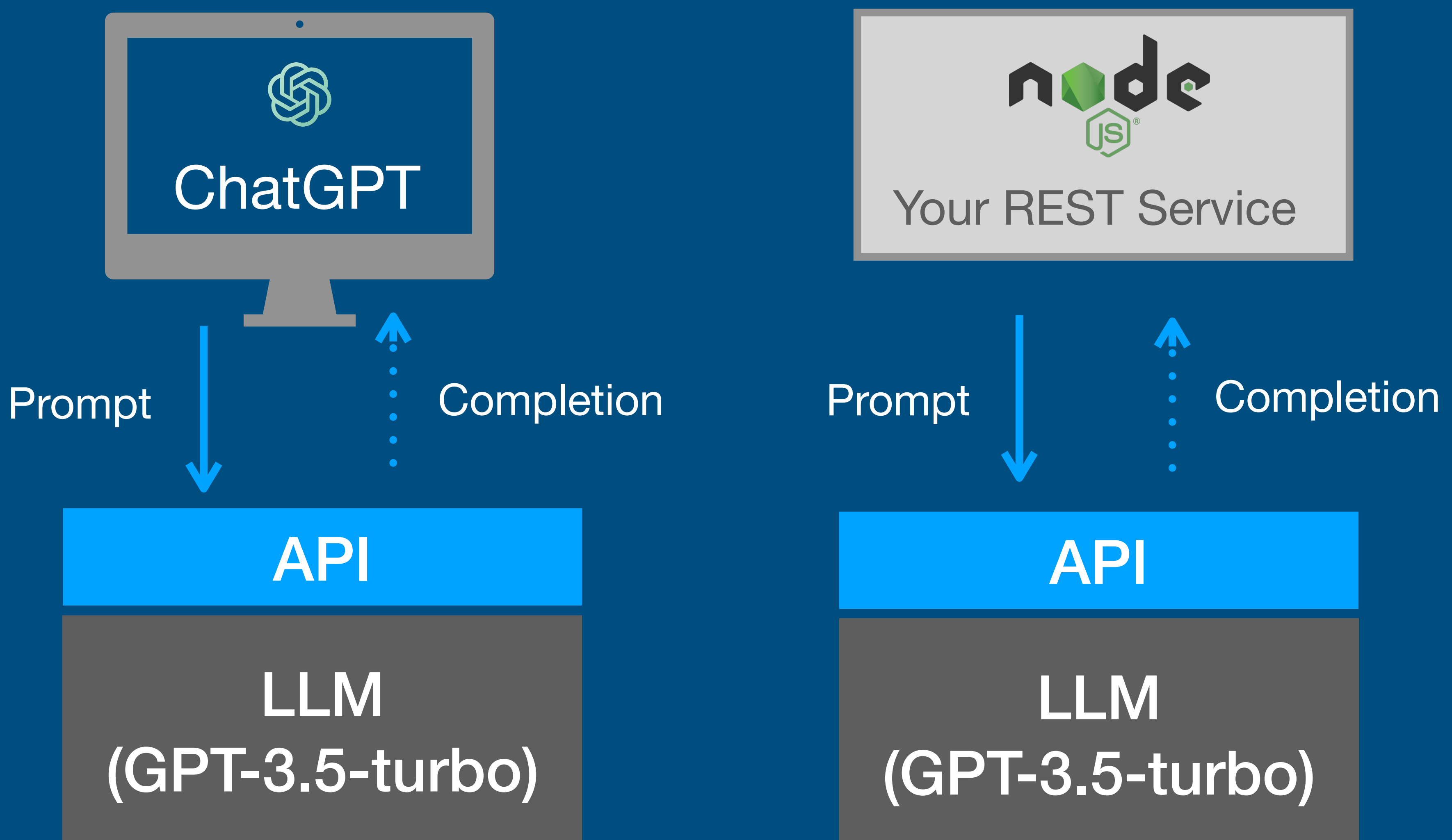
How to build a **REST SERVICE THAT CALLS GPT** With basic JavaScript

AI for Developers, not Data Scientists



Calling a GPT model

- GPT models are the LLMs (Large Language Models) that power ChatGPT
- There are multiple GPT releases (GPT-3, GPT-4, GPT-5 coming soon?)
- Just like ChatGPT, you'll call a GPT model with your REST service



1

Install Node

- Download and install:
<https://nodejs.org>
- Verify the install in your terminal:

```
~ % node -v
```

- If the installation succeeded, the version will print

2

Initialize your project

- Create a new directory for your project.
- Navigate to it in your terminal.
- Run the following command:

```
~/node-openai % npm init -y
```

- Creates a new package.json file, initializing the project.

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Install Node modules

- Node modules:
 - `express`: which makes server creation quick and easy
 - `langchain`: which provides a framework for building Apps with LLMs
 - `@langchain/openai`: which provides OpenAI integrations through their SDK
- In the same terminal, run the following command:

```
~/node-openai % npm install express \
  langchain @langchain/openai
```

- This command will download the modules into your project.

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Create the server file

- Create a file called server.mjs in the project directory.
- Open it in a text editor and add the following lines of code:

```
import express from "express";

const app = express();

import { ChatOpenAI } from "@langchain/openai";

const chatModel = new ChatOpenAI({});

app.get('/', async (req, res) => {
  const response =
    await chatModel.invoke(
      "Can you simply say 'test'?"
    );
  res.send(response.content);
});

app.listen(3000, () => {
  console.log(`Server is running on port 3000`);
});
```

- Register here:
<https://platform.openai.com>
- Obtain an API key:
 - Simply select 'API keys' in the upper left navigation
 - Select '+ Create new secret key'
 - Copy the key somewhere safe for now

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Set an environment variable

- In the same terminal, run the following command with your key value:

```
~/node-openai % export \  
OPENAI_API_KEY=<YOUR_KEY_VALUE>
```

- *Optionally* add this command to your bash profile: `~/ .zshrc`

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Launch your server

- Back in the terminal, run the following command:

```
~/node-openai % node server.mjs
```

- Open your web browser and visit: <http://localhost:3000>
- You'll see the response from the OpenAI model: test

Congratulations!

- You're REST service is complete!
- Quick Tips:
 - Pay attention to your usage in the OpenAI UI
 - Try adding a query parameter for the prompt
 - Look at LangChain's ChatPromptTemplate



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