

# The **SESS10N** Prompt Engineering Workshop

A use-case based approach  
16 October 2024, Stuttgart

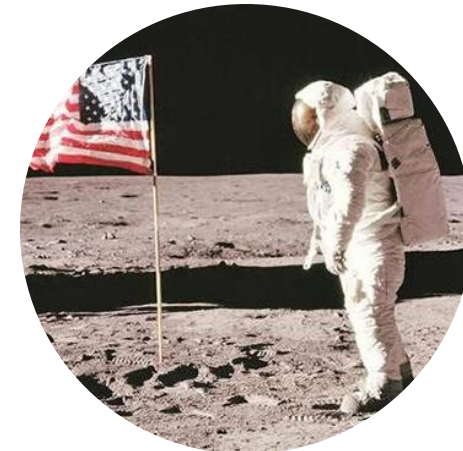
# What We'll Cover

- Introduction
- Workshop Overview
- The OpenAI Playground
- Use-case Based Learning
- Key Take-aways



# Who Am I

- Neil Sinclair, Senior Data Scientist, Berlin
- Deloitte strategy consultant turned data scientist
- Projects: retail, insurance, numerous GenAI projects and Data Product Factory



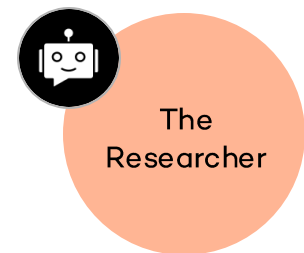
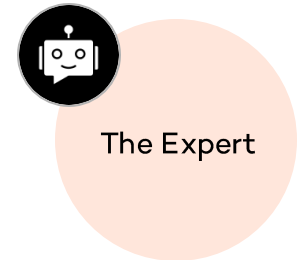
# Overview of the Workshop

## My Assumptions About You

- A big part of your role is **making decisions**
- You want something that can help you make **better decisions quicker**
- You want to **reduce tasks that take up a lot of time** and have little value so you can focus where you **make the biggest impact**

## Our Approach

- We will focus on **use-cases** to help you be more efficient
- We will learn techniques only as they support the use-cases
- This is a **hands-on session**: most of the time you'll be working
- There will be **small prizes**



# Overview of the Browser

The screenshot shows a browser window with three tabs: "Assistants Playground - OpenAI", "2.1 The Exec Assistant Part 1", and "Prompt Engineering Workshop". The address bar shows the URL: platform.openai.com/playground/assistants?assistant=asst\_HOoKHVjQqpXfTvUQQmlpMQM5. The browser's bookmark bar includes "Bookmarks", "Home - Microsoft...", "General family doc...", "51 Machine Learn...", "Home | Pythonic P...", and "Effort I Effort Rec".

The page content shows a sidebar with navigation options: "PLAYGROUND", "Chat", "Assistants" (highlighted), "TTS", and "Completions". The main area is titled "Playground" and displays the assistant name "asst\_HOoKHVjQqpXfTvUQ..." and a "THREAD" section. A "Name" field contains the text "Enter a user friendly name" and "asst\_HOoKHVjQqpXfTvUQQmlpMQM5". Below it, the "System instructions" section is partially visible.

Three orange arrows point to specific areas of the browser window:

- The first arrow points to the tabs and address bar area, labeled "The OpenAI Playground (where we work)".
- The second arrow points to the "2.1 The Exec Assistant Part 1" tab, labeled "The instructions to follow along".
- The third arrow points to the "Prompt Engineering Workshop" tab, labeled "The area to paste your interesting results".

# The OpenAI Playground

The screenshot shows the OpenAI Playground interface with several annotations:

- “Assistants” selected:** Points to the “Assistants” menu item in the left sidebar.
- File upload area:** Points to the “+ Files” button in the TOOLS section.
- Instructions on how the bot should behave:** Points to the “System instructions” text area.
- The model you’re using:** Points to the “Model” dropdown menu showing “gpt-4o”.
- Select “Playground”:** Points to the “Playground” tab in the top navigation bar.
- Clean the conversation:** Points to the trash icon in the top right corner.
- Your message to the bot:** Points to the “Enter your message...” input field in the chat area.

# The Expert

Adding an expert to your team

# Starting with the Basics: The Expert

- Let's get started!
- Go to your browser and click on the second tab – all of the templates you need for us to get started are there





# Key Takeaways

- The **system message** defines the **character of the bot**
- Add information about **your company or department** to get more **custom results**
- **More detail** is better
- The process is **experimental** – create, test and iterate
- You can also put this “personality description” at the **top of your user message**

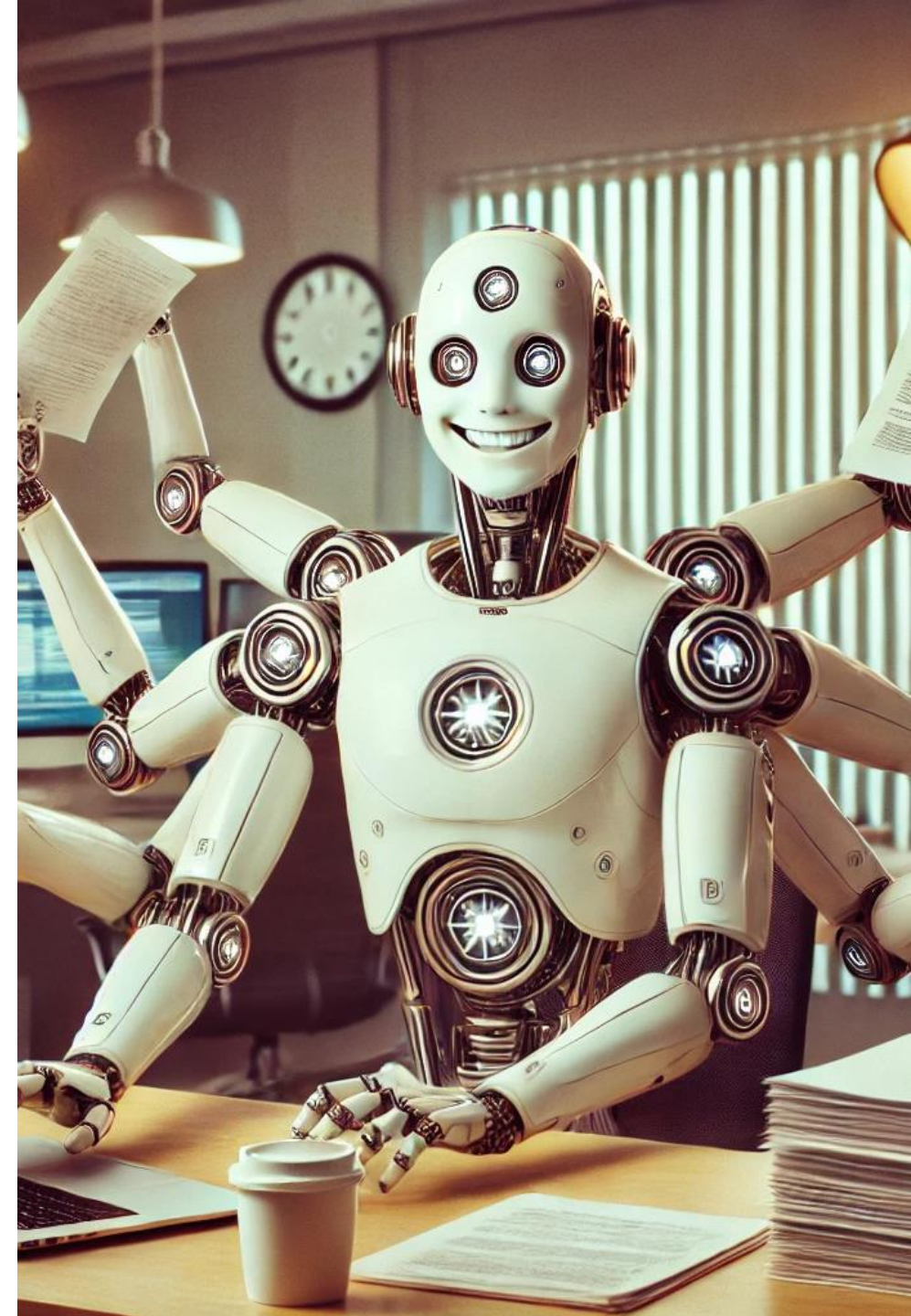


# The Executive Assistant

A personal executive assistant so you can focus on what matters

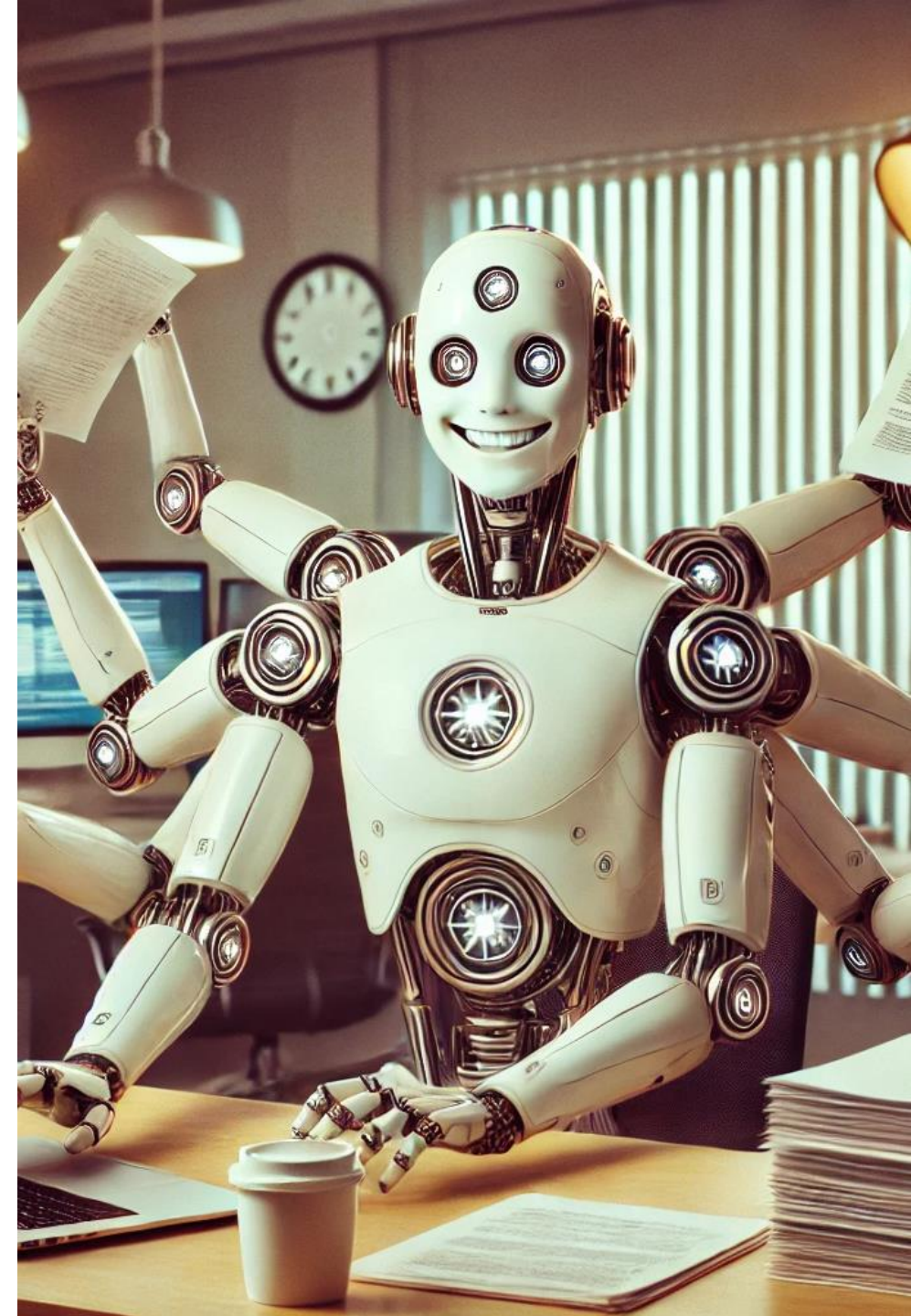
# Automate the Boring Things: The Executive Assistant

- Like a great executive assistant, your personal bot can take over **some of the boring work** you need to do
- Need to **translate** something quickly, no problem
- Need someone to check **your work for mistakes**, you can trust your assistant
- Need to **draft the perfect email** in seconds, let your assistant do that for you



# Key Takeaways

- Your bot can **speed up mundane tasks**
- **Adding information about your company** will help the bot to include this info in your work
- Give your bot **the key points** and they can fill in the rest
- You can **iterate on the work** with the bot by asking it to change parts of its work
- **You MUST check their work** before you send it off

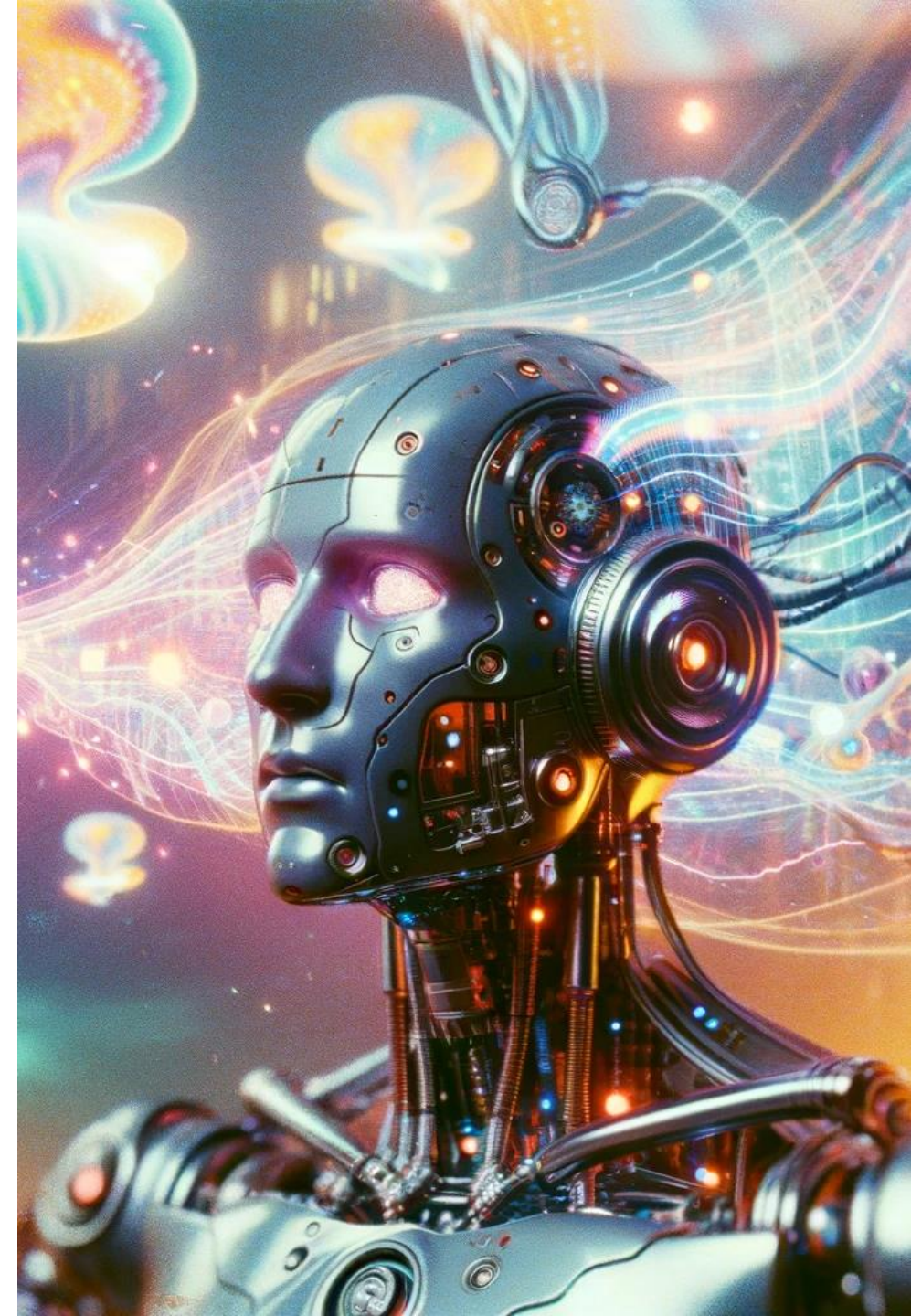


# The Research Assistant

Giving your bot documents so they can give you insights ASAP

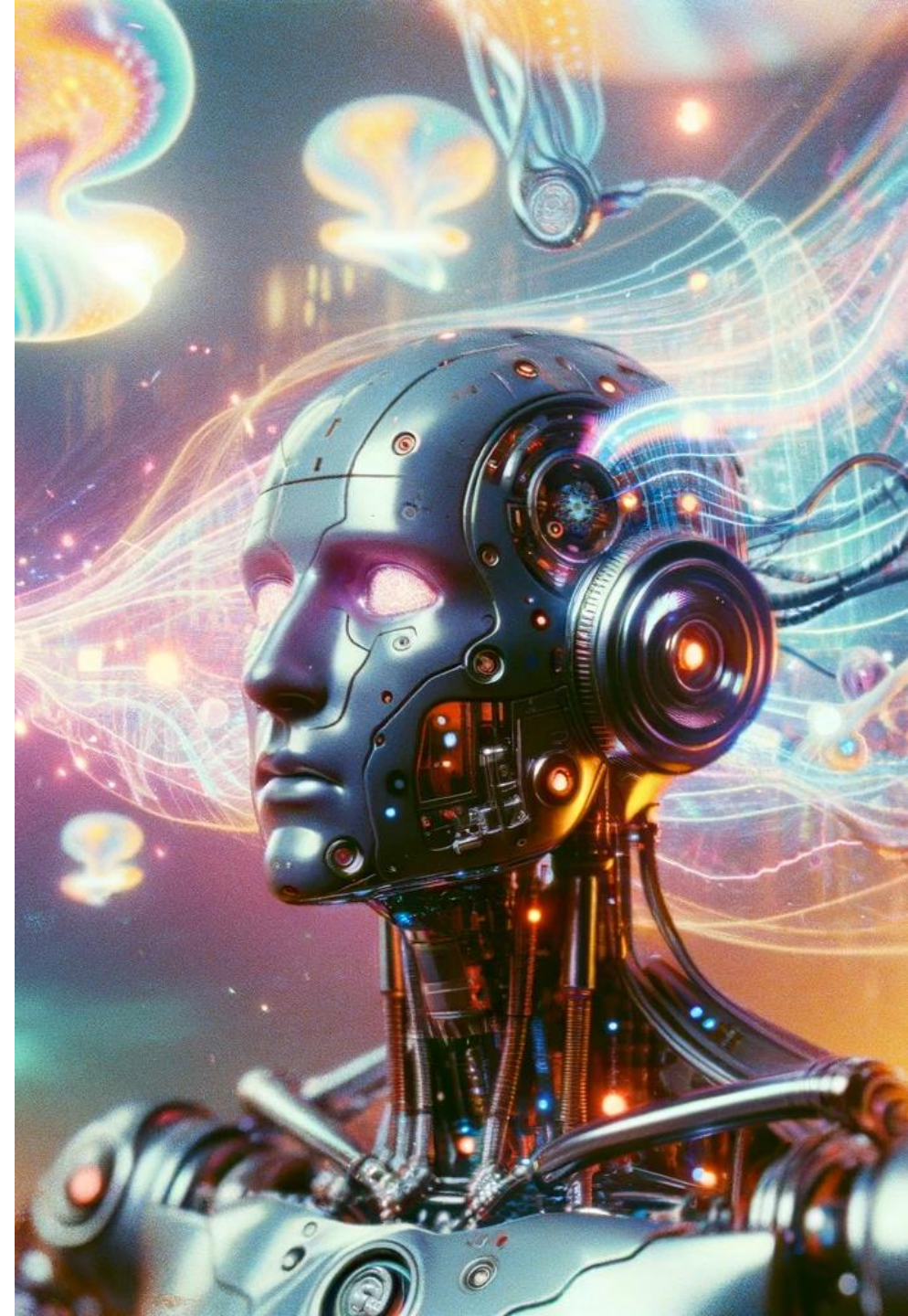
# Hallucinations and Reasoning

- Bots are very good at **generating text which looks correct**, but which has no basis in truth – this is called **hallucinating**
- One way to stop this is to **give information to bot** to answer questions from
- Like a good student with a good textbook in front of them, bots are (surprisingly) **good at reasoning** when the **information they have is good**
- When a bot generates a response using an external document, we call this **Retrieval Augmented Generation - RAG** for short



# Key Takeaways

- Providing your bot with information to answer a question vastly improves its accuracy
- You can take this to the next level by uploading whole documents
- You can tell your bot how you want it to answer/summarise information
- You can ask your bot for insights (i.e. not just a summary) on a document



# Workshop Takeaways

Three things to takeaway from today



# Key Takeaways

- With **clever, iterative design** of the system prompt, GenAI assistants are an excellent tool for being more efficient and giving you **more time to do the things where you add real value.**
- In the same way you **wouldn't send a working student's work to the board** without checking it, **always check your assistant's work** before sharing it!
- **GenAI assistants make excellent researchers** and they can help you get to the core of something very quickly before you dive into the details yourself



Let's update your industry and build a more desirable future – **together.**