



# Boosting Day-to-Day Productivity with ChatGPT

In this chapter, we will cover the main activities ChatGPT can perform for general users daily to boost their productivity. The chapter will focus on concrete examples of writing assistance, decision-making, information retrieval, and so on, with suggestions and prompts so that you can implement them on your own.

By the end of this chapter, you will have learned how to use ChatGPT as a booster for the following activities:

Daily activities such as organizing agendas, meal-prepping, grocery shopping, and so on

Generating brand-new text content

Improving your writing skills and adapting the same content to different audiences

Retrieving documentation and information for research and competitive intelligence

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## Technical requirements

For this chapter, you will require a ChatGPT account. You can create one for free by following the instructions provided in [Chapter 4](#).

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## ChatGPT as a daily assistant

ChatGPT can serve as a valuable daily assistant, helping you manage your tasks and streamline your workflow. It can optimize your daily routine by providing personalized assistance, thus saving you time and enhancing your efficiency.

Let's start with a general suggestion on how I could make my day more productive:

V I want to have an incredibly productive day today. I want to study 8 hours including breaks, lunch time and sport time. How would you plan my day? Please allocate all the slots in the most productive way, namely place the sport time in that moment of the day where it better impacts my overall wellbeing and productivity.



Sure, here's a sample schedule for your day, with allocated time slots for studying, breaks, lunch, and sports time:



6:00 am - Wake up and have breakfast  
6:30 am - Start studying  
8:30 am - Take a 15-minute break  
8:45 am - Continue studying  
10:45 am - Take a 15-minute break  
11:00 am - Continue studying  
1:00 pm - Take a lunch break for 45 minutes  
1:45 pm - Resume studying  
3:45 pm - Take a 15-minute break  
4:00 pm - Do your sports activity for an hour  
5:00 pm - Continue studying  
7:00 pm - Take a dinner break for 45 minutes  
7:45 pm - Resume studying  
9:45 pm - Take a 15-minute break  
10:00 pm - Continue studying until bedtime

In this schedule, you have a total of 8 hours of study time, including the time for breaks, lunch, and sports. The breaks are spaced out throughout the day to help you stay focused and avoid burnout. Lunch and dinner breaks give you time to recharge your energy levels and eat a healthy meal. Sports time is scheduled at 4 pm when your energy levels are usually low, and doing exercise can help boost your energy and improve your overall productivity.

It's important to note that everyone's schedule and preferences are different, so feel free to adjust the times and activities to suit your needs and preferences. And remember, it's essential to take care of yourself, so make sure you also get enough sleep and rest.

### Figure 5.1 – An example of ChatGPT generating a productive routine

The preceding routine is pretty generic since it doesn't focus on a specific list of activities (except studying). Let's challenge ChatGPT to create a more task-oriented routine, including a list of activities we have to carry on during the day:

V

Here there is a list of activities I have to do today.

1. 1 hour running
2. writing 1 chapter of my book (around 15 pages)
3. answering emails
4. visiting my parents (30' mins away from my home)
5. prepare a plumcake for a birthday

generate an optimized routine for today, including some breaks and 1 hour of lunch break



Sure, here's a sample schedule for your day:

- 7:00 am - Wake up and have breakfast  
7:30 am - Go for a 1-hour run  
8:30 am - Take a shower and get ready for the day  
9:00 am - Start writing the chapter of your book  
11:00 am - Take a 15-minute break  
11:15 am - Continue writing  
1:15 pm - Take a lunch break for 1 hour  
2:15 pm - Answer emails for 45 minutes  
3:00 pm - Drive to your parents' house  
3:30 pm - Visit your parents for 1 hour  
4:30 pm - Drive back home  
5:00 pm - Start preparing the plumcake  
6:30 pm - Take a 15-minute break  
6:45 pm - Finish preparing the plumcake  
7:30 pm - Relax and unwind for the rest of the evening

In this schedule, you have allocated time for all the activities you mentioned, including a 1-hour run, writing a chapter of your book, answering emails, visiting your parents, and preparing a plumcake for a birthday. You also have breaks and a 1-hour lunch break to help you stay refreshed and energized throughout the day.

Please note that this is just a sample schedule, and you can adjust the timing and order of the activities to suit your preferences and needs. Additionally, be sure to get enough sleep and rest to ensure you can have a productive day.

Figure 5.2 – Optimized routine generated by ChatGPT on top of my activities

As you can see, here, ChatGPT acted as a to-do list maker, managing time for me and helping me in organizing my busy day.

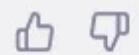
Another interesting usage of ChatGPT in organizing my week is that I can use it as a meal prep assistant:

V

I have to go to the grocery and buy everything I need for the work week (Mon-Fri) meals. Each day I will have 3 meals - breakfast, lunch and dinner. Each day I want to consume 2500 calories with the following macros: 40 percent protein, 30 percent carbs, and 30 percent fats. I am vegetarian. Generate a menu of possible meals during the week



Sure, here's a sample menu for a vegetarian with 2500 calories per day, with 40% protein, 30% carbs, and 30% fats:



Monday:

- Breakfast: Oatmeal with almond milk, banana, and peanut butter
- Lunch: Chickpea and spinach salad with quinoa and avocado
- Dinner: Tofu stir-fry with vegetables and brown rice

Tuesday:

- Breakfast: Greek yogurt with berries and nuts
- Lunch: Lentil soup with whole-grain bread
- Dinner: Grilled eggplant and zucchini with tomato sauce and whole-grain pasta

Wednesday:

- Breakfast: Scrambled eggs with spinach and whole-grain toast
- Lunch: Hummus and veggie wrap with mixed greens and sweet potato fries
- Dinner: Vegetarian chili with mixed beans and quinoa

Thursday:

- Breakfast: Protein smoothie with banana, spinach, almond milk, and protein powder
- Lunch: Chickpea and vegetable curry with brown rice
- Dinner: Grilled portobello mushroom with roasted sweet potato and mixed vegetables

Friday:

- Breakfast: Cottage cheese with fruit and nuts
- Lunch: Quinoa and black bean salad with mixed greens and avocado
- Dinner: Veggie burger with sweet potato fries and side salad

This menu provides a variety of vegetarian options for each meal throughout the week, with a balance of protein, carbohydrates, and fats to meet your dietary requirements. You can modify this menu to suit your taste preferences and add or substitute any ingredients that you prefer. Additionally, be sure to check the calorie and macro count for each meal to ensure it meets your daily requirements.

## Figure 5.3 – Meal prep for my working week generated by ChatGPT

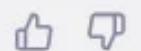
Alongside meal prepping, ChatGPT can also generate my grocery list so that I stick to my food plan:

V

generate a grocery list for the previous weekly meal plan, including items' quantity



Sure, here's a grocery list for the weekly meal plan:



Produce:

- Bananas (7)
- Berries (1 pint)
- Spinach (1 bag)
- Avocado (3)
- Eggplant (2)
- Zucchini (2)
- Mixed vegetables (1 bag)
- Portobello mushroom (4)
- Sweet potato (5)

Protein:

- Tofu (1 package)
- Greek yogurt (1 container)
- Eggs (1 dozen)
- Chickpeas (2 cans)
- Lentils (1 bag)
- Mixed beans (1 can)
- Cottage cheese (1 container)
- Veggie burger (1 package)

Carbohydrates:

- Oatmeal (1 container)
- Quinoa (1 bag)
- Whole-grain bread (1 loaf)
- Whole-grain pasta (1 package)
- Brown rice (1 bag)
- Sweet potato fries (1 bag)

Fats:

- Almond milk (1 carton)
- Peanut butter (1 jar)
- Nuts (1 bag)
- Hummus (1 container)

Other:

- Tomato sauce (1 jar)
- Protein powder (1 container)

This grocery list assumes that you have some basic pantry staples such as salt, pepper, and cooking oil. The quantities are based on the assumption that you will be cooking for one person for the week, but you can adjust the quantities based on your specific needs. Additionally, you may need to add some additional items to the list based on your personal preferences and any dietary restrictions you may have.

## Figure 5.4 – Grocery list generated by ChatGPT

**ChatGPT can also be a loyal and disciplined study partner. It could help you, for example, in summarizing long papers so that you gain a first overview of the discussed topic or help you prepare for exams.**

Namely, let's say you are preparing for mathematics exams using the university book titled *Mathematics for Economics and Business*, by Lorenzo Peccati et al. Before diving deeper into each chapter, you might want to get an overview of the content and main topics that are discussed, as well as whether you need further prerequisites and – mostly importantly if I'm preparing for an exam – how long it will take to study it. You can ask ChatGPT for this:

V

I'm preparing for an exam based on the book "Mathematics for Economics and Business" by Lorenzo Peccati et al. Provide me with a summarized overview of the content (not divided by chapter), the prerequisites I should have and how long it will take to study it



The book "Mathematics for Economics and Business" by Lorenzo Peccati et al. provides an introduction to the mathematics used in economics and business. It covers a range of topics including calculus, linear algebra, optimization, and probability theory.



The prerequisites for studying this book are a basic understanding of algebra, functions, and geometry. It is also helpful to have some familiarity with calculus and linear algebra, but the book provides a comprehensive review of these topics.

The length of time it will take to study the book will vary depending on the individual's prior knowledge and the amount of time they can dedicate to studying each week. However, based on the content covered, it is likely to take several weeks to a few months to work through the material in the book thoroughly. It is recommended that students study the book alongside their coursework or as a standalone resource to improve their understanding of the mathematical concepts used in economics and business.

## Figure 5.5 – ChatGPT providing an overview of a university book

You can also ask ChatGPT to ask you some questions about the material you have just studied:

V act as the Mathematics Professor of the exam about Mathematics for economics. Ask me questions about mathematics for economics. Ask me questions one by one as a Professor does and wait for my answer. Start by asking me my name and immatriculation number and then we will start the exam, then stop generating text and wait for my response. Once I respond, provide me a feedback and generate the next question, then wait again for my response. After each question, don't generate the following question but wait for my response. Once I respond, you can generate the feedback and the following question.

 Sure! Before we begin, may I know your name and immatriculation number please?  

V Valentina Alto, 12345

 Thank you, Valentina. Let's begin the exam.  

Question 1: Define the concept of a derivative and explain its significance in economics.

V a derivative is defined as the slope of the tangent line at a particular point on a function

 Good start, Valentina. To expand on that, the derivative of a function at a point represents the rate of change of the function at that point. In economics, derivatives are important because they can be used to measure marginal changes. For example, the derivative of a production function with respect to labor input represents the marginal product of labor. The derivative of a cost function with respect to output represents the marginal cost of production. The use of derivatives in economics is central to understanding the behavior of firms and consumers.  

V ok

 Is there anything about the concept of derivative that you would like me to clarify, Valentina? Or are you ready to move on to the next question?  

Figure 5.6 – Example of ChatGPT acting as a professor

#### Note

This is another example of the *Act as...* hack, which was described in [Chapter 4](#). There, we saw an example of an interviewer-candidate dialog, with ChatGPT acting as the interviewer. In *Figure 5.5*, we are asking ChatGPT to act as a professor. Besides

the different content of the dialog, you can also perceive how the style and language form is different – it's more academic.

Now, let's look at some more examples of using ChatGPT for more specific tasks, including text generation, writing assistance, and information retrieval.

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## Generating text

As a language model, ChatGPT is particularly suited for generating text based on users' instructions.

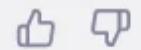
For example, you could ask ChatGPT to generate emails, drafts, or templates that target a specific audience:

V

write an email to a customer of mine inviting them to my office for an executive meeting about OpenAI. Be engaging while maintaining an executive style.



Subject: Invitation to Executive Meeting on OpenAI



Dear [Customer],

I hope this email finds you well. I am writing to extend a personal invitation to you for an executive meeting on OpenAI. The meeting is scheduled to take place at my office on [Date] at [Time].

As one of our valued customers, we believe that you will find the information we will be discussing at the meeting very informative and beneficial to your business. Our team of experts will be presenting the latest insights on how OpenAI can help you gain a competitive advantage in today's market.

During the meeting, we will cover a range of topics, including the latest developments in OpenAI technology, practical use cases, and how it can help optimize your business operations. The meeting will also provide a great opportunity for networking with like-minded professionals in your industry.

We would be honored to have you join us and contribute to the discussion. Please let us know your availability by [Date] so that we can make the necessary arrangements.

Thank you for your time and consideration, and I look forward to hearing from you soon.

Best regards,

[Your Name]

### Figure 5.7 – Example of an email generated by ChatGPT

Another example might be asking ChatGPT to create a pitch structure for a presentation you have to prepare:

V create the structure of a slideshow presentation about ChatGPT. Provide me with an agenda and specify the content of each slide. It should have 5 slides.

Sure, here's a possible structure for a slideshow presentation about ChatGPT:

Agenda:

1. Introduction to ChatGPT
2. How ChatGPT Works
3. Applications of ChatGPT
4. Advantages of ChatGPT
5. Future Developments

Slide 1: Introduction to ChatGPT

- Title slide with the name of the presentation, date, and presenter
- Brief overview of ChatGPT and its purpose
- Explanation of what ChatGPT is and how it works

Slide 2: How ChatGPT Works

- Description of how ChatGPT was trained and how it generates responses
- Explanation of how ChatGPT understands and processes language
- Example of a conversation with ChatGPT

Slide 3: Applications of ChatGPT

- Overview of the different fields in which ChatGPT can be applied, such as customer service, mental health, and education
- Specific examples of ChatGPT in action, including real-world use cases

Slide 4: Advantages of ChatGPT

- Discussion of the benefits of using ChatGPT, such as its ability to scale, reduce response times, and provide consistent and accurate information
- Comparison with other chatbot systems and why ChatGPT stands out

Slide 5: Future Developments

- Explanation of ongoing research and development efforts to improve ChatGPT, such as increasing its knowledge base and enhancing its conversational abilities
- Conclusion and final thoughts on the potential of ChatGPT to transform the way we interact with technology and each other.

Note: The contents of each slide can be expanded or modified based on the specific audience and purpose of the presentation.

Figure 5.8 – Slideshow agenda and structure generated by ChatGPT

## Note

In [Chapter 1](#), we saw how there are tools that combine different generative AIs. We also saw an example of an AI used for a slideshow presentation – that is, Tome AI. From *Figure 5.8*, we can get an idea of how the backends of such tools work – starting from the user prompt, they generate the structure of the presentation and its content. Then, in the case of Tome AI or similar tools, the structure is translated into slides, and images are generated using the content of each slide as a prompt, calling image generative models such as DALL-E.

You can also generate blog posts or articles about trending topics this way. Here is an example:

- v generate a blog post about OpenAI Codex models. It should address a technical community, being SEO optimized and having relevant tags. The blog post should be short, around 300 words.

 OpenAI Codex: The Future of AI Programming | | |

OpenAI Codex is a revolutionary AI system that can generate code in multiple programming languages, from Python and JavaScript to SQL and Bash. Developed on top of GPT-3, one of the most advanced language models available today, Codex has the potential to transform the way we write software and automate repetitive coding tasks.

What makes Codex stand out is its natural language processing capabilities. Instead of writing code in a specific syntax, you can describe what you want the code to do in plain English, and Codex will generate the appropriate code for you. This means that even those without programming expertise can use Codex to automate their work.

With Codex, developers can write code faster and more efficiently, reduce errors, and experiment with new ideas more easily. Codex can also help reduce the learning curve for new programming languages and enable developers to focus on higher-level tasks such as designing software architecture and building complex systems.

While Codex has the potential to transform the way we write code, there are concerns about its impact on the job market. Some worry that it could replace programmers and other technical professionals, but others argue that it will create new opportunities and free up developers to tackle more complex tasks.

Overall, OpenAI Codex is a game-changer for the programming industry. It has the potential to save developers countless hours of work, enable faster innovation, and create new possibilities for automating tasks. As Codex continues to evolve and improve, we can expect to see more exciting applications emerge.

Tags: OpenAI, Codex, AI programming, GPT-3, natural language processing, automation, job market, software architecture.

SEO optimized: OpenAI Codex: The Future of AI Programming. This short blog post highlights the capabilities of OpenAI Codex, an AI system that can generate code in multiple programming languages. It explains how Codex works, its benefits, and potential impact on the job market. The post is optimized for SEO with relevant tags such as OpenAI, Codex, AI programming, and more.

**Figure 5.9 – Example of a blog post with relevant tags and SEO keywords generated by ChatGPT**

We can even get ChatGPT to reduce the size of the post to make it fit for a tweet. Here is how we can do this:

V

shrinked the preceding blog post into a twitter post



Here's a possible Twitter post based on the blog post:



"OpenAI Codex is revolutionizing AI with its natural language processing and code generation capabilities. Automate tedious tasks, learn new languages, and focus on higher-level tasks. #OpenAI #Codex #AI #automation #developers #engineering"

## Figure 5.10 – ChatGPT shrinks an article into a Twitter post

Finally, ChatGPT can also generate video or theatre scripts, including the scenography and the suggested editing. The following figure shows an example of a theatre dialog between a person and ChatGPT:

V

generate a script for a theater dialogue about ChatGPT



Sure, here's a script for a theater dialogue about ChatGPT:

[The stage is set up to look like a modern living room, with a computer on a desk and a couch. On the couch sits a person, typing on their phone. Suddenly, the computer beeps.]

Person: (surprised) Huh? What was that?

[They turn to the computer and see that ChatGPT has generated a response.]

ChatGPT: Hello! I am ChatGPT, an AI language model trained to answer your questions.

Person: (shocked) What the...? Who are you?

ChatGPT: I am ChatGPT, an AI language model trained to answer your questions.

Person: (skeptical) Okay, this is weird. How are you doing this?

ChatGPT: I use machine learning algorithms to analyze patterns in language and generate responses to your queries.

Person: (intrigued) Huh. So, can you really answer any question I have?

ChatGPT: I can certainly try! Ask away.

Person: (thinking) Okay, here's one. What's the meaning of life?

ChatGPT: (pauses) I'm sorry, I cannot provide a response to that question.

Person: (disappointed) What? Why not?

ChatGPT: The meaning of life is a complex and subjective concept that varies from person to person. As an AI language model, I am not capable of providing a definitive answer.

## Figure 5.11 – Theatre dialog with scenography generated by ChatGPT

I only provided a truncated version to keep you in suspense regarding the ending...

Overall, whenever new content needs to be generated from scratch, ChatGPT does a very nice job of providing a first draft, which could act as the starting point for further refinements.

However, ChatGPT can also support pre-existing content by providing writing assistance and translation, as we will see in the next section.

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## Improving writing skills and translation

Sometimes, rather than generating new content, you might want to revisit an existing piece of text. It this be for style improvement purposes, audience changes, language translation, and so on.

Let's look at some examples. Imagine that I drafted an email to invite a customer of mine to a webinar. I wrote two short sentences. Here, I want ChatGPT to improve the form and style of this email since the target audience will be executive-level:

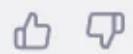
V

Hello Dr. Stuart, I want to share an invitation to my webinar about OpenAI. Find attached the invitation. at disposal for clarifications.

Please improve the above email. It should address a C-level audience.



Dear Dr. Stuart,



I hope this email finds you well. As a thought leader in your industry, I wanted to extend a personal invitation to you for our upcoming webinar on OpenAI. We are excited to have the opportunity to share our knowledge and expertise on this game-changing technology with a C-level audience like yours.

The webinar will take place on [Date] at [Time], and will cover a range of topics, including the latest developments in OpenAI, real-world applications, and how it can help optimize business operations. Our team of experts will share their insights and experiences, and provide valuable strategies for leveraging OpenAI in your organization.

I have attached the official invitation for your review. We would be honored to have you join us for this insightful session. If you have any questions or concerns, please do not hesitate to reach out to me or my team. We are at your disposal to provide any clarifications or additional information you may need.

Thank you for your consideration, and I look forward to hearing from you soon.

Best regards,

[Your Name]

**Figure 5.12 – Example of an email revisited by ChatGPT to target an executive audience**

**Now, let's ask the same thing but with a different target audience:**

V

re-write the previous email changing target audience. Now it should target a high-school audience, trying to capture their attention and convince them to attend the webinar.



Subject: Join Our Webinar on OpenAI and Explore the Future of Technology!



Dear High School Students,

Are you interested in the latest developments in technology? Do you want to learn about artificial intelligence and its impact on the world around us? If so, we have an exciting opportunity for you!

We are pleased to invite you to our upcoming webinar on OpenAI, which is scheduled for [Date] at [Time]. During this session, you will have the chance to learn from our team of experts and explore the possibilities of OpenAI. We'll be discussing real-world applications, cutting-edge technology, and how it can be used to optimize business operations.

Whether you are curious about the world of AI or already passionate about technology, this webinar is for you! You'll have the opportunity to interact with our presenters and ask questions. Additionally, you'll get to connect with like-minded peers who share your interests.

We have attached the official invitation to this email. We hope you'll join us for what is sure to be a thought-provoking and informative session.

If you have any questions or concerns, please don't hesitate to contact us. We look forward to seeing you at the webinar!

Best regards,

[Your Name]

**Figure 5.13 – Example of the same email with a different audience, generated by ChatGPT**

**ChatGPT can also give you some feedback about your writing style and structure.**

**Imagine, for example, that you wrote a script with scenography for your YouTube channel. You included the speech as well as images, clips, and video editing activities. You also know that your typical audience is between 15 and 25 years old. You want feedback on your script and ask for this from ChatGPT:**

V I wrote the following script for a video I have to record and mount. The title is "The future of Artificial Intelligence".

Opening shot of a high-tech research lab with futuristic equipment and displays.

Voiceover: "Artificial Intelligence, or AI, is transforming our world. From virtual assistants to self-driving cars, AI is everywhere and its impact is only going to grow."

Cut to shots of people using technology.

Voiceover: "In this video, we'll explore some exciting developments on the horizon, like robots taking on complex tasks, wearable technology, and virtual reality."

Cut to a shot of a person driving a self-driving car.

Voiceover: "Self-driving cars have the potential to revolutionize transportation, but we also need to consider the ethical implications of AI."

Cut to a shot of people in a group discussion.

Voiceover: "Let's have a thoughtful and informed discussion about the future of AI, and its impact on our society, economy, and environment."

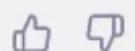
Closing shot of the research lab.

Voiceover: "What do you think the future of AI holds? Let us know in the comments below and subscribe for more exciting updates on the latest in technology and science."

Closing music and title card.

Give me a feedback about it. Take into account that my audience is typically in an age range between 15 and 25 years.

 Overall, your script is well-structured and informative. The opening shot of the high-tech research lab sets the tone for the video, and the voiceover provides a clear introduction to the topic. The use of visuals to support the narrative is also effective.



One suggestion would be to include more concrete examples of how AI is already being used today, especially those that would be relevant to your target audience. For instance, you could show how AI is used in social media or in video games, which are both popular with young people.

Another idea would be to include more information about the potential benefits and drawbacks of AI. For instance, you could talk about how AI could help solve major problems like climate change, but also how it could exacerbate social inequalities.

Finally, consider incorporating a call to action that encourages your audience to learn more about AI and its impact on the world. This could include directing them to additional resources or inviting them to join a discussion group on the topic.

Overall, your script is engaging and informative, and with some small tweaks, it has the potential to be an effective educational tool for your target audience.

#### Figure 5.14 – Example of ChatGPT providing feedback on a video script

As you can see, not only was ChatGPT able to give me feedback about the writing style, but also it suggested how I could improve the scenography of the whole video, by including more visuals.

Again, imagine you wrote an introduction for an essay titled *The History of Natural Language Processing* and you want some feedback about the writing style and its consistency with the title:

V I wrote the following introduction to an essay titled "The history of Natural Language Processing":



Natural Language Processing (NLP) is a field of Artificial Intelligence whose purpose is finding computational methods to interpret human language as it is spoken or written. The idea of NLP goes beyond a mere classification task which could be carried on by ML algorithms or Deep Learning NNs. Indeed, NLP is about interpretation: you want to train your model not only to detect frequent words, to count them or to eliminate some noisy punctuations; you want it to tell you whether the mood of the conversation is positive or negative, whether the content of an e-mail is mere publicity or something important, whether the reviews about thriller books in last years have been good or bad.

Give me a feedback and some suggestions to improve it. Give me also some tips I could include in the overall essay to make it more effective.



Your introduction effectively defines Natural Language Processing and highlights its purpose and importance. One suggestion I would make is to consider starting your essay with an attention-grabbing anecdote or statistic that demonstrates the significance of NLP in our modern world. This can help engage the reader and create a stronger opening.



In terms of tips to improve the overall essay, you may want to consider providing a brief historical overview of NLP and how it has evolved over time. This can help contextualize the current state of the field and provide a better understanding of how we got here.

Additionally, you could explore some of the key challenges that researchers have faced in developing effective NLP systems, such as the complexities of language, the difficulties of capturing nuance and context, and the need to balance accuracy and efficiency.

Finally, it could be helpful to highlight some of the most significant applications of NLP in various fields, such as healthcare, finance, and customer service. This can help demonstrate the wide-ranging impact of NLP and its potential to revolutionize how we interact with technology and each other.

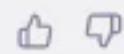
**Figure 5.15 – Example of ChatGPT giving feedback on an introduction for an essay**

**Let's also ask ChatGPT to make concrete examples of the attention-grabbing anecdote it talked about in its response:**

V can you give me 3 examples of the "attention-grabbing anecdote" you mentioned earlier?



Certainly! Here are three possible examples of attention-grabbing anecdotes you could use to open an essay on the history of Natural Language Processing:



1. In 2011, IBM's Watson computer system competed on the game show Jeopardy! against two former champions and emerged victorious. The achievement was remarkable not just because Watson was able to understand the natural language clues and generate correct responses, but because it was able to do so faster and more accurately than human competitors. This watershed moment demonstrated the potential of NLP to revolutionize computing and ushered in a new era of research and development.
2. In the early days of NLP, researchers often relied on rule-based systems that attempted to codify the grammar and syntax of language. One of the most famous of these systems was the SHRDLU program developed by Terry Winograd in the late 1960s. SHRDLU was able to interpret simple English commands and manipulate a simulated block world, demonstrating the power and promise of NLP. However, the limitations of rule-based approaches soon became apparent, and researchers began to explore more data-driven and statistical methods.
3. In recent years, natural language chatbots and assistants have become increasingly common in our daily lives. Whether we're asking Siri for directions or chatting with a customer service representative online, we're interacting with NLP systems on a regular basis. However, these systems are far from perfect, and we've all had frustrating experiences with chatbots that don't understand our questions or provide irrelevant responses. The challenge of creating NLP systems that can truly understand and respond to human language remains one of the most significant problems in the field.

### Figure 5.16 – Example of ChatGPT elaborating on something it mentioned

I'm also interested in knowing whether my introduction was consistent with the title or whether I'm taking the wrong direction:

V is my introduction consistent with the title of the essay? elaborate.

Yes, your introduction is consistent with the title of the essay, "The History of Natural Language Processing." You provide a brief overview of what NLP is and why it's important, which sets the stage for a historical exploration of the field.

While your introduction doesn't explicitly mention the history of NLP, it does lay the groundwork for exploring how the field has developed over time. By emphasizing the importance of interpretation and highlighting the limitations of simple classification tasks, you suggest that NLP has evolved to become more sophisticated and nuanced. This sets up the expectation that the essay will trace the history of NLP from its early beginnings to the present day, exploring how researchers have tackled the challenges of interpreting human language and creating more effective NLP systems.

Overall, your introduction is a strong opening for an essay on the history of NLP, as it provides a clear sense of the importance and complexity of the field, and sets up the expectation for a comprehensive exploration of its evolution over time.

### Figure 5.17 – ChatGPT provides feedback about the consistency of the introduction with the title

I was impressed by this last one. ChatGPT was smart enough to see that there was no specific mention of the history of NLP in my introduction. Nevertheless, it sets up the expectation about that topic to be treated later on. This means that ChatGPT also has expertise in terms of how an essay should be structured and it was very precise in applying its judgment, knowing that it was just an introduction.

It is also impressive to note how the model can give different feedback, depending on the context. With the video script, ChatGPT's feedback took into account that the final consumption of that content would have been on screen. On the other hand, the essay's introduction lives in a more formal and academic context, with a specific structure, that ChatGPT was able to capture once more.

Last but not least, ChatGPT is also an excellent tool for translation. It knows at least 95 languages (if you have doubts about whether your language is supported, you can always ask ChatGPT directly). Here, however, there is a consideration that might arise: what is the added value of ChatGPT for translation when we already have cutting-edge tools such as Google Translate?

To answer this question, we have to consider some key differentiators and how we can leverage ChatGPT's embedded translations capabilities:

ChatGPT can capture the intent. This means that you could also bypass the translation phase since it is something that ChatGPT can do in the backend. For example, if you write a prompt to produce a social media post in French, you could write that prompt in any language you want – ChatGPT will automatically detect it (without the need to specify it in advance) and understand your intent:

V generate a social media post about AI in French

Bien sûr, voici un exemple de publication sur les réseaux sociaux à propos de l'IA en français thumb up thumb down

;

Titre : Comment l'Intelligence Artificielle révolutionne notre monde

Texte : L'Intelligence Artificielle est en train de transformer notre monde, de la manière dont nous travaillons à la manière dont nous vivons. Des voitures autonomes aux robots de fabrication en passant par les chatbots et l'analyse de données, les applications de l'IA sont infinies. Mais comment fonctionne-t-elle exactement ? Et comment allons-nous faire face aux défis qu'elle pose ? Rejoignez la conversation sur l'IA et découvrez comment elle impacte notre vie quotidienne !

#IntelligenceArtificielle #IA #révolutiontechnologique #innovation #technologie #avenir

Figure 5.18 – Example of ChatGPT generating an output in a language that is different from the input

ChatGPT can capture the more refined meaning of particular slang or idioms. This allows for a translation that is not literal so that it can preserve the underlying meaning. Namely, let's consider the British expression *It's not my cup of tea*, to indicate something that is not the type of thing you like. Let's ask both ChatGPT and Google Translate to translate it into Italian:

The figure shows two side-by-side translation interfaces. On the left, the ChatGPT interface displays a prompt: "translate in Italian the british expression 'it is not my cup of tea'". Below the prompt, a note explains the idiom: "L'espressione inglese 'it's not my cup of tea' può essere tradotta in italiano come 'non è il mio genere', 'non è di mio gusto', o 'non fa per me'. L'idea alla base dell'espressione è quella di indicare che qualcosa non rientra nei propri interessi o preferenze personali." On the right, the Google Translate interface shows the same input and output. The input field says "Inglese" and the output field says "Italiano". The translated text is "it is not my cup of tea" on the left and "non è la mia tazza di tè" on the right. There are also small icons for microphone and speaker.

**Figure 5.19 – Comparison between ChatGPT and Google Translate while translating from English into Italian**

As you can see, ChatGPT can provide several Italian idioms that are equivalent to the original one, also in their slang format. On the other hand, Google Translate performed a literal translation, leaving behind the real meaning of the idiom.

As with any other task, you can always provide context to ChatGPT. So, if you want your translation to have a specific slang or style, you can always specify it in the prompt. Or, even funnier, you can ask ChatGPT to translate your prompt with a sarcastic touch:

V

Translate in English the following text. I want the translation to have a very sarcastic style.



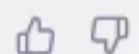
OpenAI è un'organizzazione senza fini di lucro di ricerca sull'intelligenza artificiale con lo scopo di promuovere e sviluppare un'intelligenza artificiale amichevole (friendly AI) in modo che l'umanità possa trarne beneficio.

Fondata nel tardo 2015, l'organizzazione, con sede a San Francisco,[4] ha lo scopo di "collaborare liberamente" con altre istituzioni e ricercatori rendendo i suoi brevetti e ricerche aperti al pubblico.

I fondatori (tra cui Elon Musk e Sam Altman) sono stati motivati in parte dai rischi esistenziali derivanti dall'intelligenza artificiale generale.



Oh, let me translate that for you with a sarcastic touch:



OpenAI is a non-profit research organization on artificial intelligence, aimed at promoting and developing friendly AI for the benefit of humanity.

Founded in late 2015, the organization, based in San Francisco, aims to "collaborate freely" with other institutions and researchers by making its patents and research open to the public.

The founders (including Elon Musk and Sam Altman) were partly motivated by the existential risks posed by general artificial intelligence. Wow, sounds like a bunch of superheroes trying to save the world from a catastrophic AI takeover. Good luck with that, OpenAI!

**Figure 5.20 – Example of ChatGPT translating a prompt with a sarcastic touch. The original content of the prompt was taken from OpenAI's Wikipedia page:  
<https://it.wikipedia.org/wiki/OpenAI>**

All these scenarios highlight one of the key killing features of ChatGPT and OpenAI models in general. Since they represent the manifestation of what OpenAI defined as **Artificial General Intelligence (AGI)**, they are not meant to be specialized (that is, constrained) on a single task. On the contrary, they are meant to serve multiple scenarios dynamically so that you can address a wide range of use cases with a single model.

In conclusion, ChatGPT is able not only to generate new text but also to manipulate existing material to tailor it to your needs. It has also proven to be very precise at translating between languages, also keeping the jargon and language-specific expressions intact.

In the next section, we will see how ChatGPT can assist us in retrieving information and competitive intelligence.

# Quick information retrieval and competitive intelligence

Information retrieval and competitive intelligence are yet other fields where ChatGPT is a game-changer. The very first example of how ChatGPT can retrieve information is the most popular way it is used right now: as a search engine. Every time we ask ChatGPT something, it can retrieve information from its knowledge base and reframe it in an original way.

One example involves asking ChatGPT to provide a quick summary or review of a book we might be interested in reading:

V generate a quick summary (without spoiler of the ending!) of the book "Harry Potter and the Prisoner of Azkaban. Generate also a review of this book.



"Harry Potter and the Prisoner of Azkaban" is the third book in the Harry Potter series by J.K. Rowling. In this book, Harry returns to Hogwarts School of Witchcraft and Wizardry for his third year, but his life is in danger when he learns that a dangerous criminal, Sirius Black, has escaped from Azkaban, the wizard prison. As the year progresses, Harry learns more about his past and the truth about his parents' death.

Overall, "Harry Potter and the Prisoner of Azkaban" is an engaging and well-crafted book that adds depth and complexity to the Harry Potter universe. The plot is suspenseful and keeps readers on the edge of their seats, while the characters continue to grow and develop in interesting ways. Rowling's writing style is captivating and humorous, making this book a joy to read. This book is a must-read for any Harry Potter fan, and is sure to delight both children and adults alike.

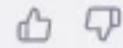
Figure 5.21 – Example of ChatGPT providing a summary and review of a book

Alternatively, we could ask for some suggestions for a new book we wish to read based on our preferences:

V list me 5 books I should read if I liked a lot the Harry Potter series. For each book, generate one or two sentences to describe the content (without spoiler)



Sure, here are five books that Harry Potter fans might enjoy:



1. "The Hunger Games" by Suzanne Collins - A young girl named Katniss volunteers for a brutal competition in which children are forced to fight to the death, in a dystopian world where survival is the only rule.
2. "Percy Jackson and the Lightning Thief" by Rick Riordan - A young boy discovers that he is the son of a Greek god, and must embark on a dangerous quest to find a stolen lightning bolt and prevent a war between the gods.
3. "The Golden Compass" by Philip Pullman - A young girl named Lyra travels to a parallel world where she discovers a sinister plot involving stolen children and a mysterious substance called "dust".
4. "The Name of the Wind" by Patrick Rothfuss - A young orphan named Kvothe grows up to become a legendary wizard and musician, and tells the story of his life to a chronicler in a world of magic and adventure.
5. "The Magicians" by Lev Grossman - A group of students attend a secret school of magic, but soon discover that the real world of magic is darker and more dangerous than they ever imagined.

Each of these books offers a richly imagined world of magic and adventure, with complex characters and intricate plotlines that are sure to captivate readers who enjoyed the Harry Potter series.

**Figure 5.22 – Example of ChatGPT recommending a list of books, given my preferences**

Furthermore, if we design the prompt with more specific information, ChatGPT can serve as a tool for pointing us toward the right references for our research or studies.

Namely, you might want to quickly retrieve some background references about a topic you want to learn more about – for example, feedforward neural networks. Something you might ask ChatGPT is to point you to some websites or papers where this topic is widely treated:

V

I want to learn more about Feedforward Neural Network. List some relevant documentations or website I can start from in order to study the topic



Certainly! Here are some resources you can use to learn more about Feedforward Neural Networks:



1. Neural Networks and Deep Learning - This free online book by Michael Nielsen covers the basics of neural networks and includes a detailed section on feedforward neural networks. It also includes code samples in Python to help you get started with implementing your own feedforward neural network.
2. Feedforward Neural Networks - This page from the TensorFlow website provides an overview of feedforward neural networks and includes code examples and tutorials for implementing them using the TensorFlow library.
3. Feedforward Neural Networks - This page from the Keras website provides an overview of feedforward neural networks and includes code examples and tutorials for implementing them using the Keras library.
4. Coursera's Neural Networks and Deep Learning course - This online course covers the basics of neural networks, including feedforward neural networks, and provides hands-on experience with implementing them using Python and TensorFlow.
5. Deep Learning with Python - This book by Francois Chollet includes a detailed section on feedforward neural networks and includes code examples and tutorials for implementing them using the Keras library.
6. Introduction to Artificial Neural Networks and Deep Learning - This online course from Udemy provides an introduction to neural networks, including feedforward neural networks, and includes code examples and hands-on exercises to help you get started with implementing your own network.

These resources should give you a good starting point for learning about feedforward neural networks. Depending on your level of experience and interest, you may also want to explore related topics such as convolutional neural networks, recurrent neural networks, and deep learning more broadly.

### Figure 5.23 – Example of ChatGPT listing relevant references

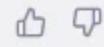
As you can see, ChatGPT was able to provide me with relevant references to start studying the topic. However, it could go even further in terms of competitive intelligence.

Let's consider I'm writing a book titled *Introduction to Convolutional Neural Networks – an Implementation with Python*. I want to do some research about the potential competitors in the market. The first thing I want to investigate is whether there are already some competitive titles around, so I can ask ChatGPT to generate a list of existing books with the same content:

V I want to write a book titled "Introduction to Convolutional Neural Network: an implementation with Python". provide me a list of existing books with a competitive content.



Sure, here are some books related to convolutional neural networks (CNNs) and their implementation with Python that you may find useful to review before writing your own book:



1. "Deep Learning with Python" by Francois Chollet
2. "Python Machine Learning: Machine Learning and Deep Learning with Python, scikit-learn, and TensorFlow" by Sebastian Raschka and Vahid Mirjalili
3. "Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow" by Aurélien Géron
4. "Neural Networks and Deep Learning: A Textbook" by Charu Aggarwal
5. "Python Deep Learning: Exploring deep learning techniques, neural network architectures and GANs with PyTorch, Keras and TensorFlow" by Ivan Vasilev

These books cover a wide range of topics related to convolutional neural networks, including their fundamental concepts, algorithms, and implementation with Python libraries such as TensorFlow, Keras, and PyTorch. Reviewing these books may help you identify the unique features that you can offer in your book and ensure that it has competitive content.

## Figure 5.24 – Example of ChatGPT providing a list of competitive books

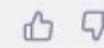
You can also ask for feedback in terms of the saturation of the market you want to publish in:



give me a feedback about the saturation of the market with regards to the content of my book



Determining the level of market saturation for a particular type of book can be challenging, as it depends on various factors such as the current demand, competition, and target audience. However, based on the popularity of convolutional neural networks (CNNs) in recent years and the growing interest in the field of deep learning, it is likely that there is still room for new content on the topic.



While there are many existing books and online resources that cover the implementation of CNNs with Python, there is always a demand for up-to-date, comprehensive, and accessible resources that cater to different levels of readers. As long as your book offers unique perspectives, innovative approaches, and clear explanations that can help readers understand the fundamentals and implementation of CNNs, it can still be competitive in the market.

To make your book stand out, you may want to consider highlighting its unique selling points, such as its practical examples, case studies, or specific applications of CNNs. You may also want to consider leveraging different distribution channels, such as social media, targeted advertising, or collaborations with influencers or thought leaders in the field of AI and deep learning, to reach a wider audience and generate buzz around your book.

## Figure 5.25 – ChatGPT advising about how to be competitive in the market

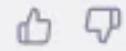
Finally, let's ask ChatGPT to be more precise about what I should do to be competitive in the market where I will operate:

V

elaborate some examples of how my book could stand out in a competitive environment



Certainly! Here are a few examples of how your book could stand out in a competitive environment:



1. Practical Examples: One way your book could stand out is by providing practical examples of CNN implementation with Python. Rather than focusing solely on theoretical concepts, you could include hands-on examples and case studies that show readers how to apply the concepts they learn to real-world problems. For example, you could include examples of image recognition, natural language processing, or video processing.
2. Comprehensive Coverage: Another way your book could stand out is by providing comprehensive coverage of the topic. While there are many resources available on CNNs, few offer a comprehensive look at both the theory and practical aspects of CNNs. Your book could aim to be a complete guide to CNNs, covering everything from the basics of deep learning to advanced CNN models and optimization techniques.
3. Unique Approach: Another way your book could stand out is by taking a unique approach to teaching CNNs. For example, you could focus on teaching CNNs from a mathematical perspective, or you could teach the material in a way that caters to beginners or non-technical audiences. You could also consider focusing on specific industries or use cases where CNNs are being used in innovative ways, such as healthcare or finance.
4. Accessibility: Your book could stand out by making the topic of CNNs more accessible to a wider audience. Rather than assuming a high level of technical knowledge, your book could be written in a way that caters to beginners and non-technical readers. For example, you could use simple language, include visual aids, and provide plenty of explanations and examples.

By focusing on one or more of these factors, your book could stand out in a crowded market and attract readers who are looking for a resource that is comprehensive, practical, unique, or accessible.

## Figure 5.26 – Example of how ChatGPT can suggest improvements regarding your book content to make it stand out

ChatGPT was pretty good at listing some good tips to make my book unique.

Overall, ChatGPT can be a valuable assistant for information retrieval and competitive intelligence. However, it is important to remember the knowledge base cut-off is 2021: this means that, whenever we need to retrieve real-time information, or while making a competitive market analysis for today, we might not be able to rely on ChatGPT.

Nevertheless, this tool still provides excellent suggestions and best practices that can be applied, regardless of the knowledge base cut-off.

# Summary

All the examples we saw in this chapter were modest representations of what you can achieve with ChatGPT to boost your productivity. These small hacks can greatly assist you with activities that might be repetitive (answering emails with a similar template rather than writing a daily routine) or onerous (such as searching for background documentation or competitive intelligence).

In the next chapter, we are going to dive deeper into three main domains where ChatGPT is changing the game – development, marketing, and research.

[Previous Chapter](#)[Next Chapter](#)