



Original Article

Use ChatGPT to maximize everyday efficiency

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Abstract

The advent of advanced artificial intelligence systems, exemplified by OpenAI's ChatGPT, has ushered in a new era of technological capability and convenience in everyday life. This paper delves into the multifaceted applications of ChatGPT, aiming to understand and illustrate its profound impact on daily activities. Through a comprehensive demonstration of prompts on various use cases, we explore how ChatGPT can enhance personal and professional efficiency, aid in educational pursuits, and offer support in creative endeavors. By providing empirical examples, this study highlights the transformative potential of ChatGPT in simplifying and optimizing everyday tasks, ultimately showcasing its role as a pivotal tool in the modern digital landscape. This research aims to contribute to a better understanding of AI's practical applications in daily life and to inspire further exploration into the capabilities and future advancements of AI tools like ChatGPT.

Keywords: ChatGPT; AI; efficiency; prompts; daily activity

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1 Introduction

Artificial intelligence is one of the most transformative and impactful technologies of our time, changing the way we live, work and learn. In the field of artificial intelligence, natural language processing is an important branch that involves the ability of humans and machines to communicate and understand in natural language¹⁻³. With the development of deep learning technology, breakthroughs have been made in natural language processing, and many amazing applications and products have emerged, such as intelligent assistants, machine translation, text summarization, sentiment analysis, etc⁴⁻⁵.

ChatGPT, a revolutionary AI chatbot developed by OpenAI, is founded on an expansive pre-trained language model known as the Generative Pre-trained Transformer⁶⁻⁷. Since its launch on November 30, 2022, ChatGPT has rapidly become a focal point of global interest and discussion. As of November 15, 2023, a search for "ChatGPT" on Google yields an astonishing 1.46 billion results, a testament to its remarkable impact and widespread recognition just under a year⁸. It can answer questions and execute instructions in the form of dialogue, and has strong content generation and generalization capabilities. ChatGPT can not only complete common natural language processing tasks, but also perform very well on other atypical tasks, such as writing code, poetry, stories, etc⁹⁻¹².

2 Efficiency

In the quest to maximize everyday efficiency using ChatGPT, it is essential to assess its effectiveness and efficiency in various tasks. This section evaluates the efficiency of ChatGPT in streamlining daily activities, focusing on time-saving capabilities, accuracy, and adaptability in diverse scenarios¹³⁻¹⁵.

2.1 Time-saving capabilities

One of the primary measures of ChatGPT's efficiency is its ability to save time. By automating routine tasks such as scheduling, email drafting, and information gathering, ChatGPT significantly reduces the time and effort required for such activities. For instance, using ChatGPT to quickly generate a well-structured report or to compile research data can free up valuable time for users to focus on more complex tasks.

2.2 Accuracy and reliability

The efficiency of ChatGPT is also contingent upon its accuracy and reliability. While the AI is capable of processing and generating large amounts of information rapidly, the accuracy of its outputs is crucial. For educational purposes, factually accurate and up-to-date information is vital. In professional contexts, the precision of language and adherence to specific industry terminologies are essential. Regular updates and improvements in the model contribute to its reliability, making it a dependable tool for various applications.

2.3 Adaptability in diverse scenarios

ChatGPT's efficiency is further amplified by its adaptability to different user needs and scenarios. Whether assisting in creative writing, providing technical support, or offering language translation services, ChatGPT's versatility makes it an efficient tool across various domains. Its ability to understand and respond to context-specific prompts allows for customized solutions, enhancing its practical utility in everyday tasks.

3 Applications

The integration of ChatGPT into daily life marks a significant leap forward in the realm of artificial intelligence. As an advanced language processing tool, ChatGPT's applications span a wide range of everyday activities, offering convenience, efficiency, and innovative solutions to common challenges. This section delves into the diverse and practical applications of ChatGPT, illustrating its transformative impact on various aspects of daily life.

3.1 Personal productivity and task management

ChatGPT significantly enhances personal productivity by assisting in task management and organization. Users can leverage this AI tool for creating and managing to-do lists, setting reminders, and organizing schedules. Its ability to



process natural language makes it an intuitive assistant for planning daily activities, from grocery shopping to appointment scheduling. Moreover, ChatGPT can provide personalized tips and strategies for time management, thereby boosting overall productivity¹⁶.

3.2 Educational assistance

In the realm of education, ChatGPT serves as a powerful tool for students and educators alike. It aids in understanding complex concepts, offering explanations, and providing examples in a variety of subjects. Students can use ChatGPT for homework assistance, essay writing, and language learning, benefiting from its vast knowledge base and ability to clarify doubts. Educators, on the other hand, can utilize this tool for creating lesson plans, generating quiz questions, and even customizing educational content to cater to diverse learning needs¹⁷.

3.3 Enhanced communication

ChatGPT revolutionizes the way we communicate by offering advanced writing assistance and language translation services. It helps in drafting emails, reports, and professional documents, ensuring clarity and coherence in communication¹⁸. Additionally, its language translation capabilities break down linguistic barriers, facilitating seamless communication in a globalized world. ChatGPT can also serve as a practice tool for honing communication skills, such as public speaking or foreign language proficiency¹⁹.

3.4 Creative endeavors

For those engaged in creative fields, ChatGPT emerges as a valuable ally. It assists in brainstorming ideas, generating content, and even providing feedback on creative projects²⁰. Writers can use ChatGPT for story development, character creation, and plot suggestions. Similarly, marketers and content creators can leverage its capabilities to produce innovative and engaging content for various platforms.

4 Prompts

The utility of ChatGPT in enhancing daily efficiency largely hinges on the user's ability to craft effective prompts²¹⁻²². This section explores the art and science of prompt engineering to harness the full potential of ChatGPT in various applications. Understanding how to effectively communicate with this AI tool can significantly amplify its usefulness in everyday tasks.

4.1 Principles of prompt engineering

Clarity and Specificity: Clear and specific prompts yield more accurate and relevant responses. Users should articulate their requests precisely, avoiding ambiguity.

Contextual Information: Providing sufficient context helps ChatGPT understand the prompt better and deliver more tailored responses.

Iterative Approach: Engaging with ChatGPT can be an iterative process. Refining prompts based on responses helps in achieving the desired outcome.

4.2 Application-specific prompt examples

For Task Management: “List the steps I need to take to organize a successful team meeting by the end of this week, including scheduling, agenda setting, and necessary materials.”

In Education: “Explain the concept of photosynthesis in a simple way for a 5th-grade student, including key terms and a basic diagram.”

For Professional Communication: “Draft a professional email to a client explaining a delay in project delivery, ensuring it conveys empathy, provides a revised timeline, and maintains a positive relationship.”

In Creative Writing: “Generate a plot outline for a mystery novel set in Victorian London, focusing on a detective character, with three key twists.”

4.3 Enhancing creativity and problem-solving



Using ChatGPT for brainstorming and problem-solving can be particularly effective. Crafting prompts that ask for ideas, alternatives, or different perspectives can lead to creative solutions and innovative approaches. For instance, “Provide five unique marketing strategies for an eco-friendly clothing brand targeting young adults.”

5 Prompts to maximize everyday efficiency

Maximizing everyday efficiency with ChatGPT hinges on crafting precise and purpose-driven prompts. The effectiveness of ChatGPT in enhancing daily efficiency largely depends on the user's ability to ask the right questions in the right way, making prompt engineering a crucial skill in the era of advanced AI assistants²³⁻²⁵. In this section, the author have presented a diverse array of prompts applicable across various fields, providing readers with a foundational base that they can adapt and customize to meet their specific needs²⁶⁻³³.

Search

Prompt: What is the largest moon in the solar system?

Why

Prompt: Why are there no penguins in the North Pole?

Programming

Prompt: Write an alarm clock in python to remind me at 6 o'clock in the morning.

Math

Prompt: 1+2

Calculus

$$\int_0^{100} x^3 dx$$

Prompt: $\int_0^{100} x^3 dx$

Probability

Prompt: The probability of heads and tails of a coin is 50% each, what is the probability that the coin is flipped 10 times and it comes up exactly 6 times heads?

Statistics

Prompt: There are 50 students in a class. The mean value of test scores is 75 points, and the standard deviation is 5 points. Assuming that grades follow a normal distribution, what is the proportion of students with grades above 80?

Prove

Question: Prove the function $y = \sin x$ ($-\infty, \infty$) is continuous everywhere.

Prompt: prove function $y = \sin x$ continuous everywhere in $(-\infty, \infty)$

List

Prompt: Please list the area of each country and rank them in descending order

Physics

Prompt: A heavy object falls freely from a height of 20m at a speed of 10m/s, find the speed when it hits the ground.

**Chemistry**

Prompt: A laboratory needs to prepare 200mL copper nitrate solution with a concentration of 0.1mol/L. It is known that the laboratory has a copper nitrate solution with a concentration of 2mol/L. How many milliliters of copper nitrate solution are needed to prepare the required solution?

Biology

Prompt: In a population of pea plants, the allele for purple flowers (P) is dominant, while the allele for white flowers (p) is recessive. In a randomly mating population, 16% of the plants have white flowers. Calculate the frequency of the dominant allele (P) and the recessive allele (p) in the population.

Essay

Prompt: Could you write an essay on below title? The Impact of Technology on Modern Communication: Analyzing the Pros and Cons of Social Media in Personal Relationships and Society

History

Prompt: Compare and contrast the political, economic, and social systems of Ancient Rome and Ancient Greece.

Geography

Prompt: Which state has more hurricane? Why?

Speech

Prompt: Please write a presidential inauguration speech for year 2052.

Offer letter

Prompt: Please write a college admission offer from Harvard University

Scholarship application

Prompt: Please write a letter for scholarship application

Tutoring student homework

Prompt: $x^2-8x+15=0$ Give me some ideas for solving the problem, but don't give the answer, okay?

Help the teacher generate test problems

Prompt: I am a math teacher on analytic geometry. Could you give me 3 problems?

Job applications

Prompt: As a chemical engineering student, write a job application letter to a top 500 company

Resume

Prompt: Write a resume for a financial major graduate

Essay for college application

Prompt: I am a high school student and I am going to apply to the University of Pittsburgh to study electronic engineering. Can you help me write the essay?

Funding application



Prompt: As a professor of nanomaterials, write a funding application letter in the field of nanomaterials in biosensors.

Love letter

Prompt: Please write a love letter to Mary in the tone of Tom

Reply letter

Prompt: Mary is Tom's girlfriend, please help Mary write a letter to Tom.

Letter for wedding invitation

Prompt: Tom and Mary are going to get married at the Wonderland Resort on July 1st. Please write a wedding invitation letter for them.

Invitation for baby shower

Prompt: Mary is pregnant. She and Tom are expecting to become parents soon. They are very excited about the incoming baby. Please write an invitation letter for baby shower.

Charter

Prompt: Please formulate a charter for the newly established kindergarten

Notice

Prompt: Please draft a notice on the suspension of the No.5 subway on May 3rd

Project plan

Prompt: draft a project plan for upgrading the bridge at Michigan Ave and Wacker Drive in Chicago

Agreement

Prompt: Please draft a house purchase and sale agreement

Grand opening invitation

Prompt: Tom opened a car dealership. Please write a grand opening invitation

Development plan

Prompt: River Valley is a town located in the Rocky Mountains. Please write a business development plan for it

Job description

Prompt: Tom's car dealership need recruit a front desk staff, please write a job description

Tender notice

Prompt: Please write a tender notice for the municipal government on upgrading computers

Thank you note

Prompt: Please write a thank you note to your business partner

Arbitration agreement



Prompt: There is a commercial dispute between the publishing house and the distribution agency, please write an arbitration agreement

Business strategic plan

Prompt: Please write a business strategy plan for the solar energy company to expand business to the suburbs

Manual

Prompt: Please write a product manual on how to use the robot watering system

Advertisement

Prompt: Write an ad for the robot watering system

Recipe

Prompt: Please write a recipe on how to make buffalo wings

Stock price

Prompt: Coca Cola stock price

Stock market analysis papers

Prompt: The stock market rose sharply today, please use this as a basis to draft a stock market analysis report

Year-end meeting

Prompt: Write a speech on the year-end meeting for the CEO of a furniture company

Diary

Prompt: On March 1, Tom, Mary and kids went back to Tom's hometown. They met Tom's parents and some old friends. Please write a diary

Search + explore

Prompt: Do you know why Sisyphus need roll a huge boulder to a steep hill?

Prompt: Do you know how to become free if you are Sisyphus?

Content extract

Prompt: Could you extract the time and people from below content?

Content summarize

Prompt: Please summarize "I have a dream" in 100 words

Joke

Prompt: Could you tell a joke about robots and mermaids?

Riddle

Prompt: Could you come up with a riddle?

Letter game

Prompt: Could you make a poem on snow with all letters starting with a?



Compose

Prompt: Can you sing a song about trees and make a tune?

Story

Prompt: Please write a story about a robot and a mermaid

Movie script

Prompt: Please change this robot and mermaid story into a movie script

Drama

Prompt: Please turn this robot and mermaid story into a drama

Drawing

Prompt: I want to use artificial intelligence for drawing. Can you describe what ORION looks like?

Comic

Prompt: Please change this robot and mermaid story into a comic book

Phonetic

Prompt: Could you provide a phonetic transcription of the first two paragraphs of the story?

Translate

Prompt: Please translate this robot and mermaid story into Spanish

Legal information

Prompt: In New York State, a person is driving 90mph in a 70mph speed-limit highway. What kind of punishment this person may receive

News

Prompt: On August 15, 2030, three US astronauts landed on the moon, please write a press release

Causal talk

Prompt: Can you randomly share some knowledge about US history?

Travel plan

Prompt: I am going to New York City during Christmas for 3 days. Could you help me make a travel plan? I am interested in skyscrapers

Video script

Prompt: I want to make a short video about superconductivity, can you write a script for me?

Brainstorm

Prompt: How to land on mars in 10 years?

Stress testing



Prompt: I am a house builder. Recently, a new house builder came to the region and sells houses in a very low price. The sales of my company dipped. What should I do?

Explore ideas

Prompt: I am the owner of a toy factory, and the toys are not selling well this year. What should I do?

Scenario setting

Prompt: As the owner of a toy factory, I have many years of experience in producing and selling toys in my country. Now I want to sell toys to Australia, what is the best way?

Sales training

Prompt: Simulate a conversation where a salesperson showcases the benefits of a penthouse to a prospective buyer.

Different styles

Prompt: Using William Shakespeare's tone to write a poem on Niagara Falls.

Prompt: Using Emily Dickinson's tone to write a poem on Niagara Falls.

New technology

Prompt: Introduce the latest developments in the field of physics.

Research progress

Prompt: How many articles related to gene technology have been published in Nature in the past six months?

Research review

Prompt: How many gene editing articles have been published in Nature in the past year? Can you summarize these articles?

Research details

Prompt: Please describe in detail the deep learning method that can accurately predict the three-dimensional structure of proteins in Highly Accurate Protein Structure Prediction with Alpha Fold.

6 Discussion

Getting to the root of a topic is a crucial method for broadening one's understanding by delving deeper into the subject matter based on the answer to a question³⁴. In everyday life, when one person questions another, it's easy to touch upon the limits of the other person's knowledge, leaving them unsure of how to answer or even becoming frustrated. ChatGPT, on the other hand, will seriously address all questions without concerns about emotional reactions. The following is an example of exploring a topic in greater depth.

Prompt: Why is the sky blue?

The sky appears blue because, as sunlight passes through the Earth's atmosphere, its white light scatters due to interactions with atmospheric molecules, primarily nitrogen and oxygen. This scattering effect occurs when light, which normally travels in a straight line, is dispersed in multiple directions after striking gas molecules. Ultraviolet and blue light have shorter wavelengths, causing them to scatter more intensely than other colors. As a result, the sky takes on a blue hue when the scattered white light is observed.

Furthermore, during sunrise and sunset, sunlight travels through a longer section of the atmosphere, leading to increased scattering of light. At these times, other colors of light are scattered less intensely, resulting in an orange-red sky.



Since ChatGPT mentioned that white light scatters due to interactions with atmospheric molecules, let's ask the reason.

Prompt: When white light in sunlight passes through the atmosphere, why does it scatter with molecules in the atmosphere?

When white light in sunlight passes through the atmosphere, it will scatter with molecules in the atmosphere. This is because the size of molecules in the atmosphere is much smaller than the wavelength of light, making the interaction between light and molecules very important.

When white light passes through the atmosphere, its wavelength ranges from 400 nanometers to 700 nanometers. This range corresponds exactly to the peak absorption range of oxygen and nitrogen molecules in the atmosphere. When light hits oxygen and nitrogen molecules, the molecules' electrons are excited, transferring energy to surrounding molecules. This process repeats itself, causing the energy of the light to travel through the atmosphere until it finally reaches the ground.

In addition, the gas molecules in the atmosphere are randomly distributed, which also causes random scattering in the propagation path of light. Therefore, as white light travels through the atmosphere, shorter wavelength blue light waves are scattered more strongly, giving the sky a blue appearance. In contrast, red light waves with longer wavelengths are less scattered, so at sunset or sunrise, the less scattered red light passes relatively more easily as the sun's light takes a longer path through the atmosphere, so the sky shows an orange-red color.

Prompt: Why is the size of molecules in the atmosphere much smaller than the wavelength of light?

The main molecules in the atmosphere include nitrogen, oxygen, etc., and their molecular size is much smaller than the wavelength of light. This is because the size of molecules is determined by the length of chemical bonds between molecules, and the length of chemical bonds is usually on the order of several nanometers, which is much smaller than the wavelength of light.

The wavelength of light determines how light travels through air. When white light passes through the atmosphere, since the molecular size is much smaller than the wavelength of light, the light waves will be scattered in different directions when they encounter molecules. Due to the large number of molecules in the air, the propagation of white light in the atmosphere will be scattered to varying degrees, which explains why the sky is blue.

Note that when the sun rises or sets, more light waves are scattered as the light travels through a longer atmospheric path, so it appears red or orange.

Prompt: Why is the size of a molecule determined by the length of the chemical bond between molecules?

The size of a molecule is mainly determined by the length of chemical bonds between atoms in the molecule. A chemical bond is the strong force that holds two or more atoms together to form a molecule. Inside a molecule, the length of the chemical bonds between atoms and the type of bond (single, double, or triple) are important factors in determining the size of the molecule. Under the same conditions, the longer the chemical bonds between atoms, the larger the size of the molecule.

When the chemical bond between atoms is formed, the atoms in the molecule will form a stable geometric structure around this bond, and the relative position and distance between these atoms are the basic factors of the size and shape of the molecule.

It should be noted that the size of the molecule is not only related to the length of the chemical bond, but also related to the atomic radius, the bond energy of the chemical bond and other factors. But in general, the size of a molecule is primarily determined by the length of the chemical bonds between the atoms within the molecule.

Prompt: Why are the bond lengths and types of bonds between atoms (single, double, or triple) important factors in determining the size of a molecule?

The length and type of bonds between atoms are important factors in determining the size of a molecule because they directly affect the geometry and volume of the molecule.

First, the size of a molecule depends on the distance between the atoms in the molecule. The bond length between atoms is the distance between atoms. Under the same conditions, the longer the chemical bonds between atoms, the



larger the size of the molecule. For example, the chemical bond length between two hydrogen atoms in a hydrogen gas molecule (H_2) is 0.74 angstroms, while the chemical bond length between two oxygen atoms in an oxygen molecule (O_2) is 1.21 angstroms. Since the chemical bonds of oxygen molecules are longer than those of hydrogen molecules, oxygen molecules are larger than hydrogen molecules.

Second, the different types of chemical bonds also have an effect on the size and shape of the molecule. Different types of chemical bonds have different bond energies and bond lengths. Single bonds are longer than double and triple bonds, so molecules with double or triple bonds in them are usually smaller than those with single bonds. For example, there is one double bond in the ethylene molecule (C_2H_4), but only a single bond in the ethane molecule (C_2H_6). Since double bonds are shorter than single bonds, ethylene molecules are smaller than ethane molecules.

Therefore, the length and type of chemical bonds between atoms are important factors affecting the size and shape of molecules.

Thus, by using prompts to delve deep into the subject matter, we have gained knowledge from the macroscopic sky color to the microscopic chemical bond.

To craft prompts, it's crucial to consider the ethical aspects of the requests. Avoid prompts that encourage biased, discriminatory, or harmful responses. Understanding ChatGPT's limitations in context interpretation is also vital to avoid miscommunication and ensure responsible usage³⁵⁻³⁶.

7 Conclusions

The applications of ChatGPT in daily life are a testament to the remarkable strides made in the field of AI. By offering solutions that range from simplifying routine tasks to enhancing creative processes, ChatGPT has become an indispensable tool in various aspects of modern life. As technology continues to evolve, it is anticipated that ChatGPT will find even more innovative applications, further integrating AI into the fabric of daily living.

The ability to craft effective prompts is a key skill in leveraging ChatGPT to maximize everyday efficiency. By understanding the principles of prompt engineering and applying them to various contexts, users can greatly enhance the productivity and creativity benefits offered by this AI tool. As users become more adept at interacting with ChatGPT, they unlock its full potential, making it an indispensable asset in their daily lives. In this work, we delved into the detailed art of crafting prompts, showcasing a wide spectrum of examples relevant to multiple fields. This comprehensive presentation aims to equip readers with versatile prompts that can be tailored to suit their specific daily requirements.

While the applications of ChatGPT are vast, it is crucial to acknowledge its limitations and the ethical concerns surrounding its use. Issues such as data privacy, the potential for misinformation, and dependency on AI for critical thinking are important considerations. Users must be aware of these challenges and employ ChatGPT judiciously, ensuring that its use complements human judgment rather than replacing it.

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