

عمادة كلية العلوم - قسم علوم الحاسوب هندسة الاستفسارات لتحسين جودة الورقة البحثية



ورشة لتحسين جودة النشر والنتائج البحثية
يقيمها قسم علوم الحاسوب ولكافة اقسام كلية العلوم في القاعة المركزية



PROMPT ENGINEERING TO IMPROVE THE QUALITY OF RESEARCH PAPER

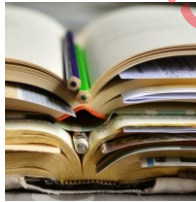
WEN. (27)-03-2024

10:00 AM - 11:30 AM

الأستاذ الدكتور بشار مكى العيساوي



التكنولوجيا



البحوث الأكاديمية



الخبر اليقين

فَمَكَثَ غَيْرَ بَعِيدٍ فَقَالَ أَحَطْتُ بِمَا لَمْ نَحِطُ بِهِ وَجِئْتُكَ مِنْ سَبَإٍ بِنَبَأٍ يَقِينٍ



Google Scholar PDF Reader

How to Write a
Great Title

How to Write an
Abstract

How to Write Your
Methods

How to Report
Statistics

How to Write
Discussions and
Conclusions

How to Edit Your
Work

Bashar Alesawi

Rapamycin in the context of Pascal's Wager: generative pre-trained transformer perspective

ChatGPT Generative Pre-trained Transformer² and Alex Zhavoronkov¹

¹Insilico Medicine, Hong Kong Science and Technology Park, Hong Kong

²OpenAI, San Francisco, CA 94110, USA

Correspondence to: Alex Zhavoronkov, email: alex@insilico.com

Keywords: artificial intelligence; Rapamycin; philosophy; longevity medicine; Pascal's Wager

Received: December 14, 2022 Accepted: December 15, 2022 Published: December 21, 2022

Copyright: © 2022 Zhavoronkov. This is an open access article distributed under the terms of the [Creative Commons Attribution License](#) (CC BY 3.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

ABSTRACT

Large language models utilizing transformer neural networks and other deep

Can GPT-3 write an academic paper on itself, with minimal human input?

Gpt Generative Pretrained Transformer, Almira Osmanovic Thunström, Steinn Steingrímsson

► To cite this version:

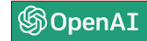
Gpt Generative Pretrained Transformer, Almira Osmanovic Thunström, Steinn Steingrímsson. Can GPT-3 write an academic paper on itself, with minimal human input?. 2022. hal-03701250



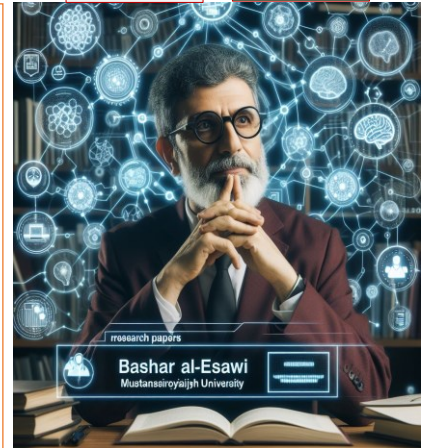
Bashar Al-Esawi

How to use AI to Generate Topic Ideas For an Essay or Paper?

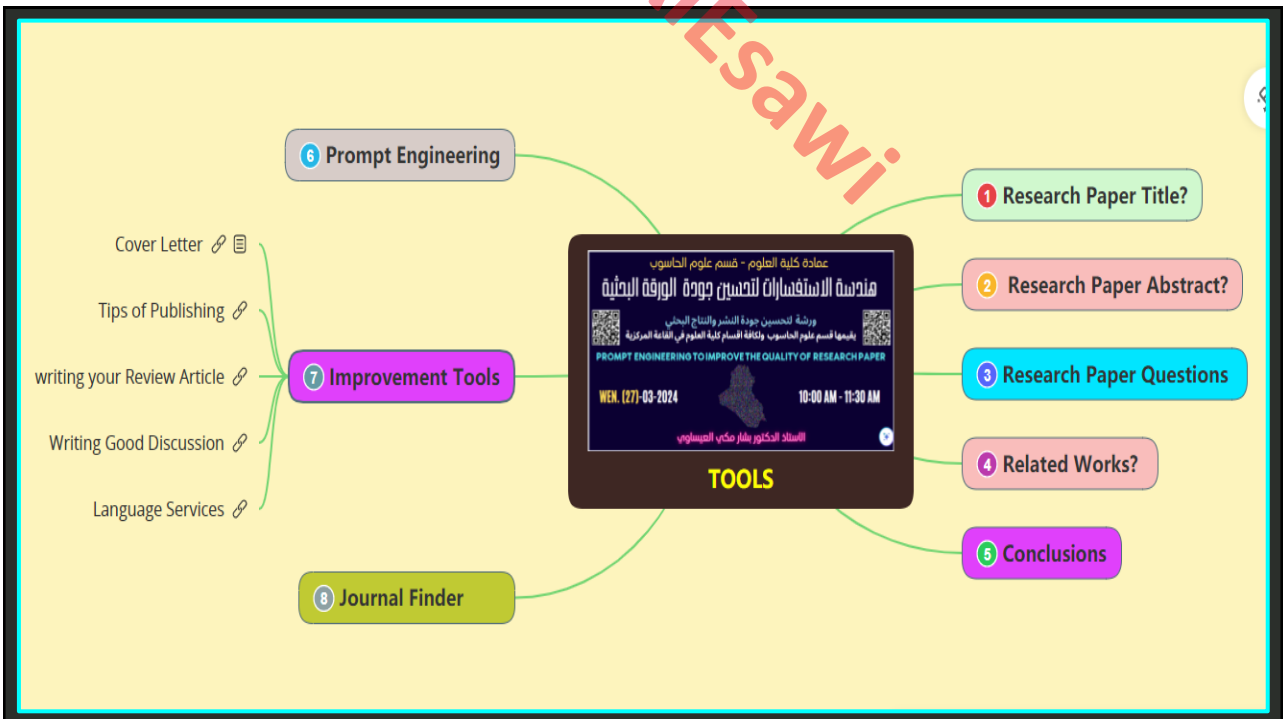
Generate Topic Ideas For my research Paper with the following description: The **Paper scope** is "Information security", **Main Keywords** are "Privacy, Authentication, Zero-Knowledge Proof, Cloud security, and Passkey". The **title** must be **more cited** and get **more visibility**.



1. "Enhancing Privacy in Cloud Computing: A Comparative Analysis of Authentication Protocols"
2. "Zero-Knowledge Proof Systems for Privacy-Preserving Authentication in Cloud Environments"
3. "Passkey Authentication Methods: Balancing Security and Usability in Cloud Security"
4. "Exploring the Role of Zero-Knowledge Proofs in Strengthening Privacy Measures in Cloud Computing"
5. "Next-Generation Authentication Techniques: Leveraging Zero-Knowledge Proofs for Enhanced Cloud Security"
6. "Privacy-Preserving Authentication Schemes for Cloud-Based Applications: A Comprehensive Review"
7. "Secure Authentication Mechanisms for Cloud-Based Services: A Focus on Passkey Systems"
8. "Zero-Knowledge Proof Protocols: Safeguarding Privacy in Cloud Environments"



Bashar Al-Esawi

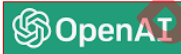
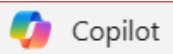


1 Research Paper Title?

Creating a compelling title for your scientific paper is crucial as it's the first thing readers see and can influence their decision to read further. Here are some key steps to consider:

- 1. Summarize Your Research:** Your title should encapsulate the essence of your study.
- 2. Identify Keywords:** Select the most significant terms from your research that are likely to be used in database searches. <These keywords should be included in your title>
- 3. Be Concise and Informative:** Aim for a title that is short yet descriptive. <It should be easy to understand and free of jargon>
- 4. Avoid Questions and Abbreviations:** Titles should be declarative, and it's best to avoid abbreviations that may not be familiar to all readers.
- 5. Reflect Your Findings:** Ensure that your title accurately reflects the main findings or conclusions of your research.

W **W** good title can lead to more citations and greater visibility in your field. See this: [Nature](#).



Suggest a creative title of the scientific paper that deals with "Unraveling the Genetic Tapestry that Insights into Chromosomal Splicing"

1. "Unraveling the Genetic Tapestry: Insights into Chromosomal Splicing" "كشف النسيج الجيني: رؤى في الربط الكروموسومي"
2. "Quantum Computing: Bridging the Gap Between Theory and Practice" "الحوسبة الكمية: سد الفجوة بين النظرية والتطبيق"

2 Research Paper Abstract?

In general Abstract must not exceed 150-300 words with the following Levels:

Level 1: Introduction

- Purpose: Start with a sentence or two explaining the purpose of your study. What question or problem were you investigating?
- Importance: Briefly state why your research is important and what gap in the literature it addresses.

Level 2: Methods

- Approach: Describe your research design, methods, and approach without going into too much detail.
- Data: Mention the type of data you collected or the sources you used.

Level 3: Results

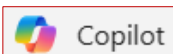
- Findings: Summarize the main findings of your research. What did your results show?
- Significance: Highlight the significance of these findings in relation to your research question.

Level 4: Discussion

- Conclusions: Conclude with the implications of your findings. How do they impact the field?
- Future Work: Optionally, suggest areas for future research if relevant.

When to write an abstract?

W **W** Good Abstract can lead to more citations and greater visibility in your field. See this: [Abstract Tips](#)



i think this abstract of my research paper is bad. Please can you help me to rewrite it as a good abstract: "This paper will look at the human genome project and its goals. I will prove that scientists have ethical and moral questions about genetic engineering because of this project."

3 Research Paper Questions

In general Research questions can be formulated using the following Perfect PROMPT in AI portal:

Prompt: "Passkey Role in Privacy and Authenticity"

Keywords: Password, Passkey, Privacy, Authenticity, Security, Random Number

The Resulted sample of Research questions as follow:

Q) How does the utilization of passkeys enhance user privacy and ensure authenticity in modern authentication systems compared to traditional password-based methods?

Q) What role do passkeys play in ensuring data privacy and confidentiality in decentralized or distributed systems, such as blockchain networks, and how do they contribute to maintaining the integrity and immutability of transaction records?

<https://typeset.io/>

<https://elicit.com/?workflow=table-of-papers>

<https://www.samwell.ai/>



Example:

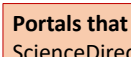
Prompt: Advanced Triplet Hybrid Model: Enhancing Botnet Attack Detection in IoT Networks

Keywords: Botnet, NIDS, Hybrid deep learning, CNN-LSTM, Machine Learning.

4 Related Works?



Aspect	Related Works	Literature Survey
Scope نطاق العمل	Narrower focus on works directly relevant to the current research topic.	Broader review of literature related to the research topic.
Purpose الغاية	Discusses and compares studies closely related to the specific problem.	Provides a comprehensive understanding of the field's historical development and knowledge.
Sources المصادر المعتمدة	Existing studies, papers, or projects that are directly relevant.	A wide range of sources, including books, articles, conference papers, theses, and scholarly works.
Emphasis التأكيد للعمل	Concise overview of prior research, highlighting similarities and differences.	Comprehensive review of the field, including foundational works and theoretical frameworks.
Context السياق المعتمد	Provides a narrower examination within the specific context of the paper.	Serves to situate the current research within the broader context of the field.



Portals that can be a source of Related Works as follow:

ScienceDirect, Scopus, Google Scholar, IEEE Xplore, ACM Digital Library, PubMed, SpringerLink,

arXiv: <https://arxiv.org/>

JSTOR: <https://www.jstor.org/>

SCISPACE: <https://typeset.io/> and <https://typeset.io/citation-generator>

Literature Review

Ask Questions on PDF

NEW Extract data

Paraphraser

6 Prompt Engineering

COVER LETTER

Cover Letter [🔗](#) [📄](#)

<https://www.elsevier.com/connect/5-tips-for-publishing-in-a-high-impact-journal>

PUBLISHING

Tips of Publishing [🔗](#)

REVIEW PAPER

writing your Review Article [🔗](#)

Discussion Paper

Writing Good Discussion [🔗](#)

LANGUAGE SERVICES

Language Services [🔗](#)

7 Improvement Tools

1. **Interact with documents.**
2. **summarize scientific articles.**
3. **[Ai Essay Writing Tool. + Generate Your Essay Through AI](#)**
4. **[Free Online Plagiarism.](#)**

8 Journal Finder

Article Processing Charge (APC). It is a fee that is sometimes charged to authors to make their work available as open access.

There are several online services that can help you find the best journal for your paper based on the title or abstract. Here are a few options:

- ❖ **Elsevier Journal Finder:** This tool allows you to search the world's leading source of academic journals using your abstract or keywords. [It helps you find journals that could be best suited for publishing your scientific article.](#)
- ❖ **ScienceGate Journal Finder:** Enter the title and abstract of your unpublished article and this tool will find the most suited and relevant journal for your manuscript. [It searches among more than 88,000 scholarly journals from 18,000 publishers.](#)
- ❖ **Wiley's Journal Finder:** Use this tool to [search directly](#) across 1,400+ journals published by Wiley. YOU Can [Search By TITLE HERE](#). [You can filter down to your areas of interest and compare editorial and publishing times, key journal metrics, and policies.](#)
- ❖ **Springer Nature Journal Suggester:** This suggester uses semantic technology to help you quickly [choose a journal](#) that is right for your paper. [Enter your abstract, description of your research, or a sample text and it provides a list of relevant journals.](#)

<https://surveys.crazyegg.com/s/1226046/ddb43e7e-2936-4204-ba29-5dc5d007113e>



Hypothesis Generation

- Give hypotheses and idea exploration about using deep learning in information security.
- Give hypotheses and idea exploration about using a chaotic system in random number generation.
- You are a computer scientist. Give hypotheses and idea exploration about using deep learning in information security.
- (List some exemplars here). Ask for similar ideas.

Literature Review

- Conduct a literature review for using nanomaterials in architecture.
- Conduct a literature review for using machine learning in botnet detection.

Meta Analysis

- Conduct Meta-analysis for using SVM in the authentication process in websites.
- Conduct Meta-analysis for using mRNA in the COVID-19 vaccine.
- "Meta-analysis" is a quantitative, formal, epidemiological study design used to systematically assess previous research studies to derive conclusions about that body of research. Conduct Meta-analysis for using Shakespearean English in movies.

Summarization

- Summarize the following paragraph in 75 words: (Abstract, Conclusions,...etc.)
- Provide details about the research or paragraph.

Idea Extraction

- What are the idea and innovation in "Title or suggested tokens"?
- EXAMPLE: What are the ideas and innovations in "using stem cells in the treatment of cancer"?

Research Design

- Create a research design based on the following research question;
- EXAMPLE: Create a research design based on the following research question; How does Zero-Knowledge Protocol increase the security of an application?

Academic or scientific writer

- Write an introduction for a research article on [The evaluation of CT Brain Protocols, Image Quality, and Radiation Dose.](#)
- Write an introduction for a research article on using fingerprints as an authentication tool in an election voting system.
- (List some examples). Ask for similar introductions.

Language translation

- Translate the following paragraph to French:
Artificial intelligence (AI) and related technologies are increasingly prevalent in business and society and are beginning to be applied to healthcare.

Informal to academic text converter

- Transform into academic text: Artificial intelligence (AI) and related technologies are increasingly prevalent in business and society, and are beginning to be applied to healthcare.

Paraphrasing

- Paraphrase the following text into Arabic: تحقيقاً لرؤية الأمم المتحدة في التنمية المستدامة بحلول عام 2030 عملت كلية العلوم على تبني تحقيق هذه الأهداف بما يتوافق مع الواقع الذي يعيشه البلد حيث عملت الكلية على تبني تحقيق الأهداف التي تساعد على تحسين جودة البيئة التعليمية داخل الكلية وكذلك استثمار ما موجود من اختصاصات علمية دقيقة داخل الكلية والمتمثلة باختصاص علوم الجور علوم الحياة والذي يتخصص بمواضيع التغيرات المناخية والطاقت المتجددة وكذلك دراسة آثار التلوث البيئي الحاصل داخل البلد بشكل عام.
- List some paraphrasing exemplars.

Data interpretation

- Extract data about the populations for each 18 Iraqi governorate and put it in table with index.
- Extract data about number of deaths by COVID 19 each European country and put it in a table with index and sort ascending.

Title and keyword generation

- Generate the title and keywords for the following abstract: (Put abstract HERE)
- Find similar titles of the following paper title:
 - S: Physics
 - T: Gravitational Pull of Supermassive Black Holes: a Review
 - S: Dentistry
 - T: Digital Dentistry and its Impact on Oral Health-Related Quality of Life
 - S: Cyber Security
 - T:

Reference management

- Suggest 10 references about applications of artificial intelligence in drug discovery.
- Suggest 5 references exactly about applications of artificial intelligence in cybersecurity with MLA format.
- (List some exemplars here). Ask for references.

Edit & Proofreading

- **Edit and proofread the following:** (Give a Paragraph here)
- **You are a reviewer, edit and proofread the following:** (type a paragraph here)
- **The following text is about [topic], as a reviewer, evaluate it in terms of [mention the terms].**

Vocabulary enhancer

- **Make a Vocabulary enhancer for the following text** depending on the computer science branch of study: (Give a Text here)
- **Find synonyms for the word "important,"**
- **Provide synonyms and related words for this text:** (Give a text here)

Grammar checker & Spell checker

- **Do a grammar checker for the following:** (Give a text here)
- **Do a spell checker for the following:** (Give a text here + Cover letter)

Consistency checker

- **Do Consistency checker the following text into Arabic:** تحقيقاً لرؤية الأمم المتحدة في التنمية المستدامة بحلول عام 2030 عملت كلية العلوم على تبنى تحقيق هذه الأهداف بما يتوافق مع الواقع الذي يعيشه البلد حيث عملت الكلية على تبنى تحقيق الأهداف التي تساعد على تحسين جودة البيئة التعليمية داخل الكلية وكذلك استثمار ما موجود من هذه الأهداف علمية دقيقة داخل الكلية والمتمثلة باختصاص علوم الجو علوم الحياة والذي يتخصص بمواضيع التغيرات المناخية والطاقت المتجددة وكذلك دراسة اثار التلوث البيئي اختصاصات علمية دقيقة داخل الكلية والحاصل داخل البلد بشكل عام.

Citation checker

- **Review the references and citations:**
- **Check the accuracy of the citation of the following text:**
- **Is the formatting of the citation correct under APA style?**
- **Are there any specific adjustments or improvements I should make to the citation for better accuracy or clarity?**

Academic Publishing

- **Academic publishing is a subfield of publishing that distributes academic research. Most academic works are published in academic journals, books, or dissertations.**

Journal finder

- **Give a list of journals for this abstract and recommend the best one: (PUT Abstract HERE)**
- **which one of these is the only highly respected and specialized?**

Journal style formatting

- **Give me for example a Journal style with MLA formatting.**
- **List some examples of MLA formatting. Ask for similar.**

Journal peer review process

- **Remember that ChatGPT is the only tool and that it must be used to understand and respond to the reviewer's comments to ensure the highest quality of your research.**

Ethical compliance checker

- **Ethics compliance is a key aspect of research and must ensure that research complies with the ethical standards of its field.**
- **How to check my academic research with Ethics compliance**

Technical compliance checker

Checking if the research document meets technical standards can be a time-consuming task and it can be challenging to determine the appropriate technical standards for research.

how to check if my paper complies with technical standards

Techniques

Zero-Shot

- The most straightforward method of prompting
- Giving the ChatGPT “orders”.
- Shown in previous examples by the color **red**.

Few-Shot

- Preferred method over zero-shot in most scenarios.
- Allows ChatGPT to understand the desired output format and respond accordingly.
- Shown in previous examples by the color **purple**.

Chain-of-Thought

- Series of reasoning steps.
- Each step is provided with demonstrations.
- Shown in previous examples with the color **aqua**.

Self-Consistency

- Sample multiple chain-of-thought prompts.
- Allows ChatGPT to select the most consistent answer.
- Shown in previous examples by the color **dark purple**.



Flavors

Task

- Giving ChatGPT a certain task makes it produce better responses.
- It is what we regularly do.

Roles

- Allows ChatGPT to generate subjective answers.
- Shown in previous examples by the color **green**.

Clear Context

- ChatGPT responds to prompts depending on the choice of words.
- Clearer context drives ChatGPT's responses to be less faulty.
- Shown in previous examples by the color **dark orange**.

Output

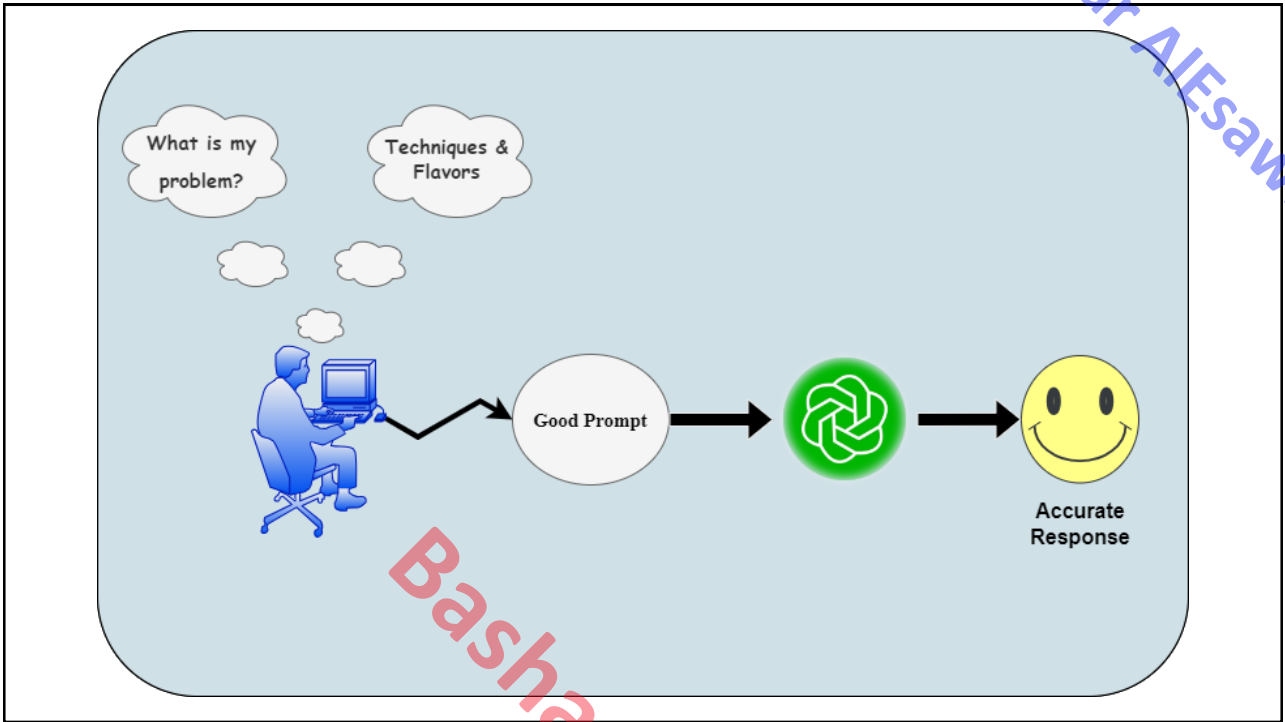
- Allows ChatGPT's answers to be more specific.
- Shown in previous examples by the color **dark blue**.

Detailed Input

- Very useful when our context is “chaotic” or we don't know enough about it.
- Can be used to assign rules that bind ChatGPT.
- Shown in previous examples by the color **orange**.



Bashar Alesawi



Bashar Alesawi

<https://www.youtube.com/watch?v=MJp0WH4-gw0>



Thank You



<https://resoomer.com/en/>

<https://typeset.io/>

<https://www.scribbr.com/ai-tools/chatgpt-assignments/>