Generative AI for Tech Transfer

This example uses ChatGPT, Perplexity AI and Claude, for tech transfer. However, it could be applied to other Generative AI tools as well.

It covers the following process and steps, starting with a published patent/paper and ending with creating a great email message. This process follows a series of tasks.

Task 1 – what is this published patent/paper about?
Task 2 – which industries would be most helped by this innovation?
Task 3 – which companies would be most helped by this innovation?
Task 4 – write a non confidential marketing summary
Task 5 – write an email message
Task 6 – check the email message

Want to Master These AI Skills? Join Our Upcoming Course!
If you're interested in learning how to apply these AI techniques in tech transfer, consider our upcoming "Rapid AI Upgrade for Tech Transfer" course. This 2-week intensive program starts April 29th and is led by Dr. D'vorah Graeser, founder and CEO of RocketSmart.io. Scroll down to the end for special discounts for AUTM members!

Introduction

The three Generative AI tools that are discussed in this paper each have their own strengths and weaknesses. Here's a rundown of each tool, what it's good at – and what it is not good at doing.

ChatGPT: https://chatgpt.com/
I find ChatGPT particularly useful for developing and debugging code, analyzing facts and situations, creating outlines and plans, and high-level design work. Its ability to understand context, provide step-by-step explanations, and generate human-like responses makes it an invaluable tool for these tasks.

However, ChatGPT also has limitations. Its knowledge is based on its training data, which has a cutoff date, so it may not have information about very recent events or

developments. It also doesn't always seem to have access to external data sources in real time, unlike Perplexity AI. Additionally, while ChatGPT strives for accuracy, it can sometimes generate plausible-sounding but incorrect information, so it's important to verify critical information from authoritative sources.

Perplexity AI: https://www.perplexity.ai/
I particularly like using Perplexity AI for searching. Like Google, Perplexity AI searches the internet in real-time, ensuring that the information provided is current and relevant. It provides the best search results in terms of links and suggested articles—of the quality that Google used to provide before it turned into a mess of spam and irrelevant information. Furthermore, Perplexity AI can be searched using complete sentences – no more guessing the right keywords. The summaries of these articles that Perplexity AI provides are good, but you need to be careful.
Like all generative AI models, it does hallucinate. Sometimes it even states a conclusion that is the opposite of what the article says.

Claude: https://claude.ai
I find Claude particularly useful for writing general content and for merging documents. Its ability to synthesize information from multiple sources and generate coherent, well-structured text makes it an invaluable asset for content creation tasks.
However, it's important to note that Claude can sometimes lose the user's specific voice, tending to revert to a more neutral, corporate tone unless given very detailed information – for example, about the audience (persona) for whom the content is intended, including their mission and vision. Claude also cannot currently search for links on the web.

Tasks to accomplish

Before you start using any Generative AI tool, it is important to understand what task you want to accomplish. In other words, you should understand your goal before you start working with the AI tool. In this section, I have broken down my previous lectures into five tasks. Performing each task involves multiple prompt/response interactions with AI tools. The goal is listed as part of the task name.

Items in italics indicate an action for you to perform, and are not part of the prompt. Items in brackets ([ ]) indicate general information. For example, in the first response from ChatGPT, brackets are used to indicate ChatGPT's entire answer. When referring back to that first response from ChatGPT, I indicate it as [First Response from ChatGPT]. Highlighting with underlining indicates my notes, with additional pointers.

Task 1 – what is this published patent/paper about?

First Prompt to ChatGPT:

upload the published patent/paper; What is this published patent/paper about?

First Response from ChatGPT:

[ChatGPT provides a text response]

First Prompt to Perplexity AI:

upload the published patent/paper; What is this published patent/paper about? Please provide references.

First Response from Perplexity AI:

[Perplexity AI provides a text response with references as links]

Second Prompt to Perplexity AI:

copy and paste the [First Response from ChatGPT]; Is this text summary accurate? Please provide references and more details. Please also indicate whether any aspect of this text summary is inaccurate.

Second Response from Perplexity AI:

[Perplexity AI provides a text response with references as links]

Summary of what we have learned

We now understand the innovation described in the published patent/paper. We can check this description against our own understanding about the innovation, as well as discuss with our researcher. We can also check the references provided by Perplexity AI, to guard against hallucinations.

Optional additional steps for this task

We could go through several rounds with Perplexity AI alone, to focus on key aspects. We could also upload the information provided by Perplexity AI back into ChatGPT, by copying and pasting the [First Response from Perplexity AI] or the [Second Response from Perplexity AI] back into ChatGPT, and asking ChatGPT to comment on this information.

Task 2 – which industries would be most helped by this innovation?

DG note – as a reminder, we are continuing from the previous task in the same chat (ChatGPT) or thread (Perplexity AI). Therefore, my first prompt to ChatGPT for this task, Task 2, is labelled as "Second Prompt to ChatGPT".

Second Prompt to ChatGPT:

copy and paste the [First Response from Perplexity AI] and the [Second Response from Perplexity AI] into ChatGPT; Based on everything in this chat, and the additional information that I just provided, which industries would be best helped by the innovation in the previously uploaded document and why? Please describe which commercial problems would be solved by this innovation and why?

Second Response from ChatGPT:

[ChatGPT provides a text response]

DG note- here, wording really counts! Because I am asking about "commercial problems" ChatGPT is likely to respond with a description of the commercial problems that could be solved, and why this innovation is a solution. However, if I used different wording, such as "please describe which new commercial products could be made with this innovation", then I would receive information about future potential products.

Third Prompt to Perplexity AI:

I want to know which industries would be best helped by this innovation and why, along with the commercial problems that could be solved and why. Please provide references and more details.

Third Response from Perplexity AI:

[Perplexity AI provides a text response with references as links]

Fourth Prompt to Perplexity AI:

copy and paste the [Second Response from ChatGPT]; Is this text summary accurate in terms of the industries that could be helped and the commercial problems solved? Please provide references and more details. Please also indicate whether any aspect of this text summary is inaccurate.

Fourth Response from Perplexity AI:

[Perplexity AI provides a text response with references as links]

DG note – optionally, you could combine the third and fourth prompt into one– but I would then recommend adding more details so that Perplexity AI does not get confused. In addition, you can ask Perplexity AI to focus on one industry at a time, when reviewing the [Second Response from ChatGPT]. In that case, you would only copy/paste the relevant information for that industry to Perplexity AI.

Summary of what we have learned:
We now understand which industries would be most helped by our innovation – including which commercial problems would be solved. We have checked this information through Perplexity AI, including checking the links.

Optional additional steps for this task: We could go through several rounds with Perplexity AI alone, to focus on a particular industry in depth.

Task 3 – which companies would be most helped by this innovation?

Third Prompt to ChatGPT:

copy and paste the [Third Response from Perplexity AI] and the [Fourth Response from Perplexity AI] into ChatGPT; Based on everything in this chat, and the additional information that I just provided, which companies would be best helped by the innovation in the previously uploaded document and why? Please describe which commercial problems for these companies would be solved by this innovation and why? Why are these commercial problems important to these companies?

Third Response from ChatGPT:

[ChatGPT provides a text response]

Summary of what we have learned:
We now understand which companies would be most helped by our innovation – including which commercial problems would be solved that are important to these companies. We have checked this information through Perplexity AI, including checking the links.

Optional additional steps for this task: We could go through several rounds with Perplexity AI alone, to focus on one company in depth.

Task 4 – write a non confidential marketing summary
DG note – previously, we were just working with ChatGPT and Perplexity AI. We will now introduce Claude, which is best for writing in my opinion.

Fourth Prompt to ChatGPT:

Based on everything in this chat, and the additional information that I just provided, please write a non-confidential marketing summary that explains why these companies would be best helped by the innovation in the previously uploaded document, but without mentioning the companies by name. Please also describe which commercial problems for these companies would be solved by this innovation and why, again without mentioning the companies by name. Please also explain why these commercial problems are important to these companies, again without mentioning the companies by name.

Fourth Response from ChatGPT:

[ChatGPT provides a text response]

First Prompt to Claude:

upload the patent/paper, and copy and paste the [Third Response from Perplexity AI] and the [Fourth Response from Perplexity AI], plus the [Third Response from ChatGPT] and [Fourth Response from ChatGPT] into Claude; I have an innovation described in the uploaded document, which I would like to license to a company such as the ones described in the provided material. Please write a non confidential marketing summary that explains why these companies would be best helped by the innovation in the uploaded document, but without mentioning the companies by name. Please also describe which commercial problems for these companies would be solved by this innovation and why, again without mentioning the companies by name. Please also explain why these commercial problems are important to these companies, again without mentioning the companies by name. Please make the potential licensing company the hero of the marketing summary, so that such a company would be interested in finding out more information about this innovation. Please also compare and contrast your version of the non-confidential marketing summary with the version that was uploaded.

First Response from Claude:

[Claude provides a text response]

Summary of what we have learned:
We now have a basic non confidential marketing summary

Optional additional steps for this task:
We could go through several rounds with Claude to create a better marketing summary, for example by changing the wording or structure.

Task 5 – write an email message

Second Prompt to Claude:

Please write an email message that I could send to these companies, that would interest them in licensing my innovation, as described in the previously uploaded document. I want to emphasize that I understand their problems, and then how my innovation can provide a solution.

Second Response from Claude:

[Claude provides a text response]

Summary of what we have learned:
We now have a basic email to accompany our non confidential marketing summary

Optional additional steps for this task:
We could go through several rounds with Claude to create a better email message, for example by changing the wording or structure.

Task 6 – check the email message

Third Prompt to Claude:

Please evaluate this email message based on the following criteria, from 0 to 100: Recipient-centric communication (i.e., focused on the recipient's needs, expectations, and experience rather than the sender's)

Reduction of distance (Does the message foster a sense of closeness and personal connection, or does it create distance between the sender and the recipient?)

Third Response from Claude:

[Claude provides a text response]

Summary of what we have learned:
We now have an even better email and understanding of how to communicate with a target company (lead)

Optional additional steps for this task:
We could go through several rounds with Claude to create a better email message in terms of wording.

Ready to become a tech transfer AI expert?
Jump start your AI training with our upcoming course!

Join our upcoming "Rapid AI Upgrade for Tech Transfer" course. This 2-week intensive program starts April 29th and is led by Dr. D'vorah Graeser, founder and CEO of RocketSmart.io.

The course includes four comprehensive live sessions covering everything from AI fundamentals to advanced applications in tech transfer. You'll learn how to leverage AI tools for workflow optimization, conduct market research to identify ideal partners, enhance IP strategy and patent analytics, and optimize licensing deals and commercialization processes—all using the AI techniques demonstrated in this guide.

Sessions run Tuesdays and Thursdays (4:00-6:00 PM PT/7:00-9:00 PM ET) with weekly office hours for personalized guidance. Just $795 for AUTM members before April 15 2025!

See you at the course!
Dvorah Graeser - Founder & CEO - RocketSmart.io