31.

JACK OF ALL TRADES, MASTER OF ALL?

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I utilise GenAI for writing literature reviews, assisting in the production of academic reports, checking grammar and language structure, creating poster graphics and other image designs, coding (including web development), making presentations, and analysing medical information, among other tasks. ChatGPT is essentially my new search engine, and I would almost exclusively use it for learning about anything I wish – until the release of the AI Overview in the Google Search (sometimes more convenient than opening the ChatGPT app).

The Deep Research coding tools (specialised fine-tuned models for research) have been excellent to help with research. I found that initially, ChatGPT's Deep Research mode was the best, until the more recent iterations of Gemini, partially due to the extensive searching it performs (usually hundreds of websites, far greater than what ChatGPT does). Gemini can also produce a single .html file to summarise the research (incredible when using prompting techniques to make this even more personalised). These research compilations can be exported as .pdf or .docx (in the case of ChatGPT) or a Google Doc (in the case of Gemini).

For grammar and language structure, I use Grammarly (a tool I have used for years). A very simple desktop and browser add-on that checks every bit of writing – emails, forms (including this one!), documents, etc. For poster graphics (and image designs for various other use cases), I would use the ChatGPT-4o image generation. This represented a significant leap in the realm of image generation compared to diffusion models. I often use ChatGPT for all image generation now – copyright-free with no worry for licenses or IP – this is problematic.

For presentations, this involves creating the overall structure, then filling in the content and potential styling of each section, which I would design myself. I usually do still make the final presentations myself instead of using more ready-to-go GenAI presentation makers, simply because making them helps in delivering and actually presenting them. For medical information, this involves asking a medical query based on a set of symptoms, prognosis, or curiosity about a specific topic, such as "What are the signs that my newborn is crying?" etc.

I have experimented with various GenAI tools. My approach has been to identify where I spend most of my time and investigate whether there are GenAI tools that can help me increase my efficiency and, therefore, productivity. I found that in the early releases of LLMs, many of these specific services were essentially

"ChatGPT wrappers" – i.e., using some prompt engineering with the OpenAI API. However, in most cases, I was able to replicate these prompts for whatever I needed to use them for (e.g. research, coding, designing presentations, etc.). Over time, ChatGPT would eventually outperform all these specialised services, even without needing extensive prompting. I have subscribed to ChatGPT Plus (the $20/month subscription) since its inception, experimented with ChatGPT Pro ($200/month) for a few months and used Claude Max ($200/month) for a few months whilst developing frontend and backend code. I have currently reverted to ChatGPT Plus and cancelled the Claude subscription, as Gemini has released their student plan (free until summer 2026). I wish to test how well Gemini performs so that I can decide which model is best for me to use in the long term.

Initially, I would use the web versions of ChatGPT, Gemini and Claude. However, since the release of the macOS ChatGPT extension, I often use the shortcut to open ChatGPT in a smaller overlay window (from any app, in any context, to search). I can also directly take and drag screenshots into this overlay window, as well as select which model and whether I want to use a temporary chat (which I often use for quick searches). For coding, I have been using GitHub Copilot since its initial private beta. It works pretty simply – as you code, it may suggest code which you can either accept or reject by just pressing "Tab" or "Esc". As it matured, I used the student GitHub Education Pack to get free access to this. It used to be a much more primitive code completion tool (usually only completing the same or next line of code, rarely doing more than that).

Claude initially excelled at producing artefacts like code; however, the Claude Code tool quickly became our go-to GenAI coding assistant, even though I still use GitHub Copilot. I have experimented with various other GenAI coding tools – the agentic and edit mode of Copilot was terrific when it first came out. OpenAI Codex (which was initially only available in the ChatGPT Pro plan) was not as great for my use cases, so I did not use it much. Nevertheless, the terminal coding tools (OpenAI Codex CLI, Gemini CLI and Claude Code) have been much superior for all kinds of coding at the present time.

I have been an early adopter

GenAI has helped me improve my academic writing, produce papers, posters and presentations, and learn a plethora of technical and theoretical information. There are three main categories of questions I ask GenAI when asking for information:

1. Questions I already know the answer to but may want a slightly more detailed explanation, or to simply "jog my memory". Here, GenAI is particularly useful, as I possess domain knowledge and can easily verify the accuracy of the answer, making it very effective.
2. Questions for which I lack the domain knowledge, perhaps a specific question about something I wish to know. Here, GenAI helps a lot, but I have to be careful with which tools I use to avoid hallucination. I usually use the web search feature by default to ensure it pulls from reliable online sources (usually asking it to rate the credibility of all sources on a scale of 1 through 10 at the end of its response), using either the AI Overview on Google or ChatGPT.

3. Questions in which I am not trying to learn new knowledge or recall any information, but rather for the actual output – writing, reviewing, and debugging code, making literature reviews, summarising text, etc. Here, it is more about the output rather than learning.

I feel like I have been an early adopter of these completely life-changing GenAI tools. I have become significantly more productive than I used to be, and the quality of my work has increased exponentially. Not only would it take a longer time (by some significant unknown factor) to do some of the work I do now, but in some cases, it would be entirely impossible to ever produce something of that quality or nature. As mentioned earlier, I also initially found that ChatGPT was able to do everything that most other specialised services were able to for the contexts I needed it for – befitting of the title "Jack of All Trades, Master of All".

GenAI Tool(s) Used:

ChatGPT
Claude
Copilot

Gemini

Grammarly