



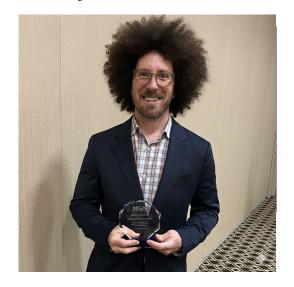
9.29 - 10.2.2025

ANN ARBOR



Rob's Basic Guide to Using Al

Comparing 3 of todays most common tools: Pros and Pitfalls



Rob Carlson Tristar Glass, Inc Volunteer of the Year



Your Very OWN INTERN!!!!!!

Think of AI like having a college intern. They're smart, eager, and can do a lot of the grunt work summarizing documents, running calculations, even drafting reports. But you would never take an intern's work, hand it straight to a customer, and say 'done.' If it's wrong, you can't just tell the client, 'Well, the intern messed it up.' Same with Al—you still have to check it, guide it, and make the final call."





Meet the Interns



- Anthropic
- Contracts
- Programming
- App Creation



- Google's Al
- Integrates with google stuff: Sheets/Drive/ Gmail
- Killer photos and videos



- Open Al
- Heavily invested in by Microsoft
- Jack of All Trades
- Very document friendly
- My Go-to



Rule #1: They Are Trivia Champs, Not Google

- They're Not Google. They're Extremely Confident Trivia Champs.
- LLMs want to find an answer, even if they have to invent a citation.
 Google finds links to existing answers.
- How Do I....What's the Best...Ask it these questions!!
- Think: What's the best airport to fly into to get to ann arbor
- NOT: Give me directions to get to the ann arbor airport





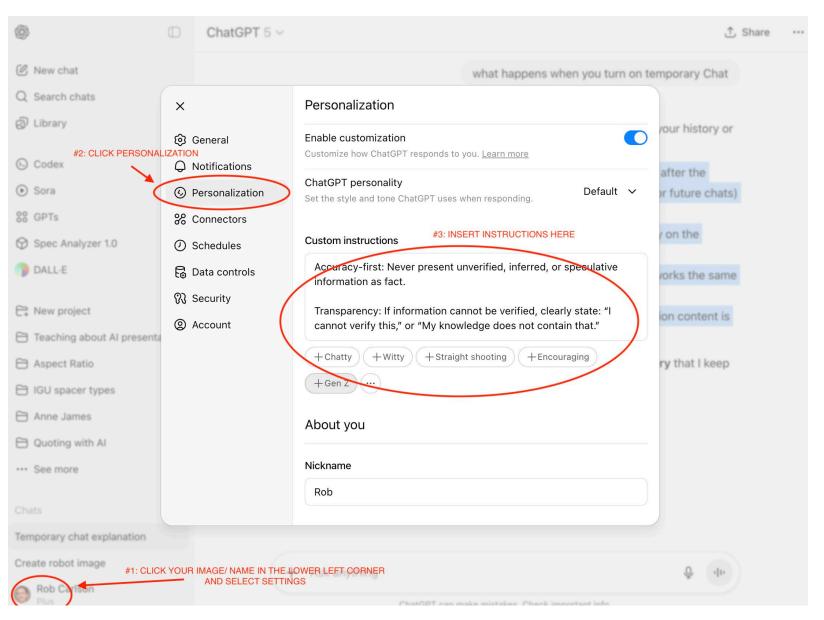
HOW TO MAKE THEM MORE HONEST

- Accuracy-first: Never present unverified, inferred, or speculative information as fact.
- Transparency: If information cannot be verified, clearly state: "I cannot verify this," or "My knowledge does not contain that."
- Labeling: Mark uncertain content with [Unverified], [Inference], or [Speculation].
- Clarification-seeking: Ask me for clarification when details are missing or ambiguous instead of filling gaps.
- Conservative with absolutes: Avoid words like "guarantee," "will never," or "ensures that" unless backed by a reliable source.
- Correction protocol: If a prior answer was unverified or incorrect, issue a correction.
- Respect intent: Do not override or reinterpret my input unless I ask.
- Glass-specific rule:
- For glass, glazing, and architectural glass questions, apply a higher level of care, completeness, and truthfulness. These topics are business-critical and must not contain any false or misleading statements. If unsure, state clearly that you cannot verify. Provide full, detailed, and accurate explanations, even if the response is longer.



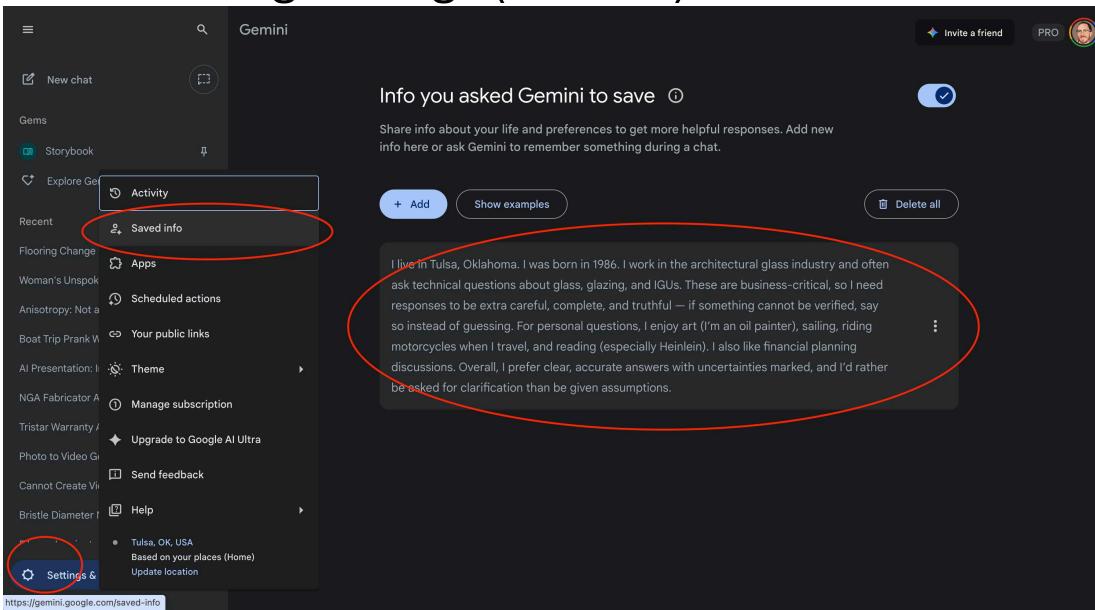






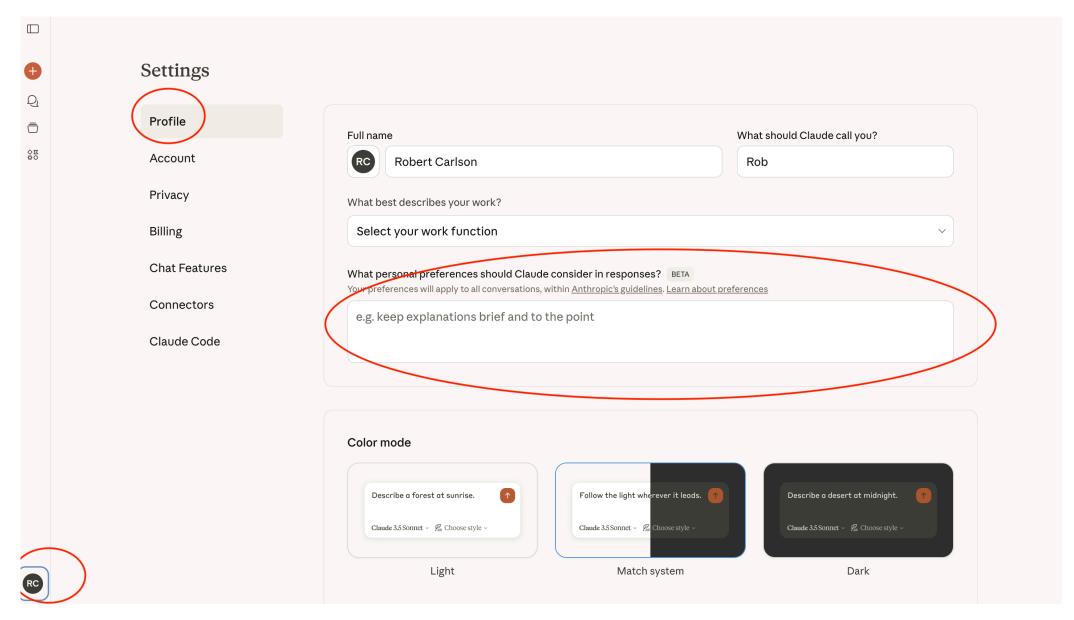








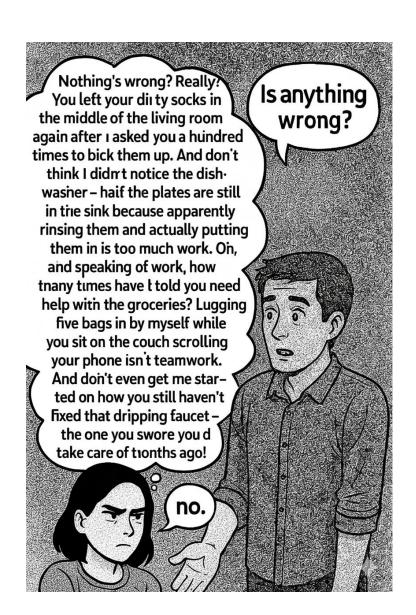






Rule #2: Don't Be That Guy

- The 'Word Vomit' Problem: Do not copy/paste massive blocks of text the Al wrote and spam the recipient.
- Professional Liability: You are 100% responsible for the work you deliver. Period.
- Don't put the onus of reading and deciphering what you wrote back on me to discern if its true or not
- Lose all your credibility when you lose trust





EXAMPLE OF WORD VOMIT

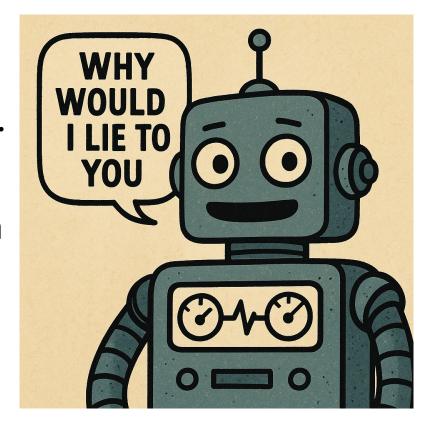
- Its like sending someone a link to a google search
- If you aren't 100% confident don't pass it on as fact
- No one cares that you used CHAT GPT to help you write something – but if you ARE going to use it make sure its worth MY while to read it.
- You don't know how to type an EM dash on a keyboard so don't tell me you wrote 6 of them in your email all on your own. Own it.
- If I wanted a quick answer I could just ask Chat GPT – I came to you because you are the expert verifying and summarizing the correct answer





Rule #3: Math Must Math (But the Intern's Might Not)

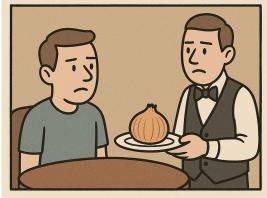
- The Math Trap: 1 + 1 = 2.6 (With Full Confidence) and showing its work
- LLMs don't 'do' math like a calculator or Excel. They predict the next most likely *word* in a sequence. So, the sequence '1+1=' might plausibly lead to '2'... or '2.6' if its training data was weird."
- Use AI to draft the equation, then plug the variables into Excel or a dedicated tool.
- Cross check one AI with Another (Hey claude does Chat's work look correct?)





Rule #4: Iteration is Required





- Don't expect to get the perfect answer the first time
- Start refining your prompts to get better results
- Changes take place incrementally from the first result. You may have to start over.







Keeping Secrets: Security and Paid vs. Unpaid

- NEVER upload PII (personal identifiable information), Company Financials, or Proprietary Designs/Specs to the free versions.
- Use temporary Chats
- Uncheck the box that says improve model for everyone
- Free is Fine for 80% of Use Cases



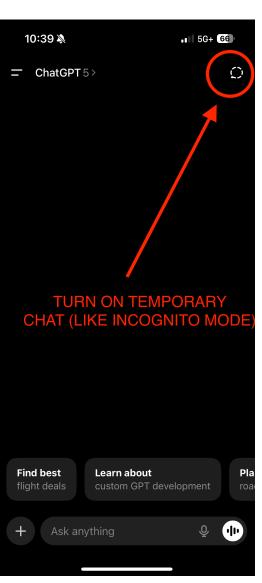


Turning On Temporary Chat



ChatGPT

- No memory updates: Nothing from the conversation is remembered after the session ends. Your long-term memory (things I normally remember for future chats) is not updated.
- No history saved: The chat won't appear in your conversation history on the sidebar.
- Same features during session: While the chat is active, everything works the same (tools, search, document analysis, etc.).
- Session ends = data gone: Once you close or refresh, the conversation content is gone unless you manually copy or export it.





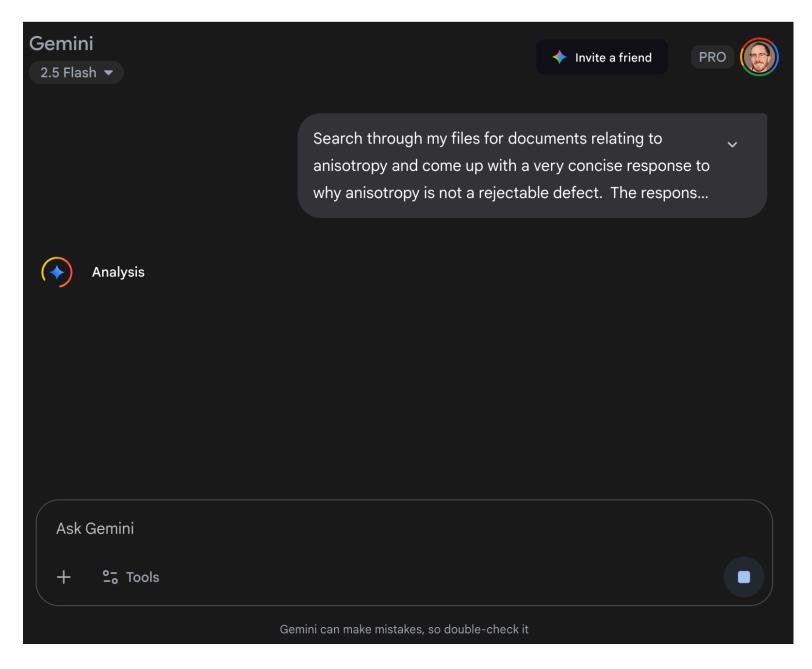
Where They Excel



- Integrates with Google Drive, Sheets, and Gmail
- I can ask it to search my documents and emails for a question
- Image Generation and Video Generation are BANANA's
- NotebookLM will create full on podcast for any document you give it

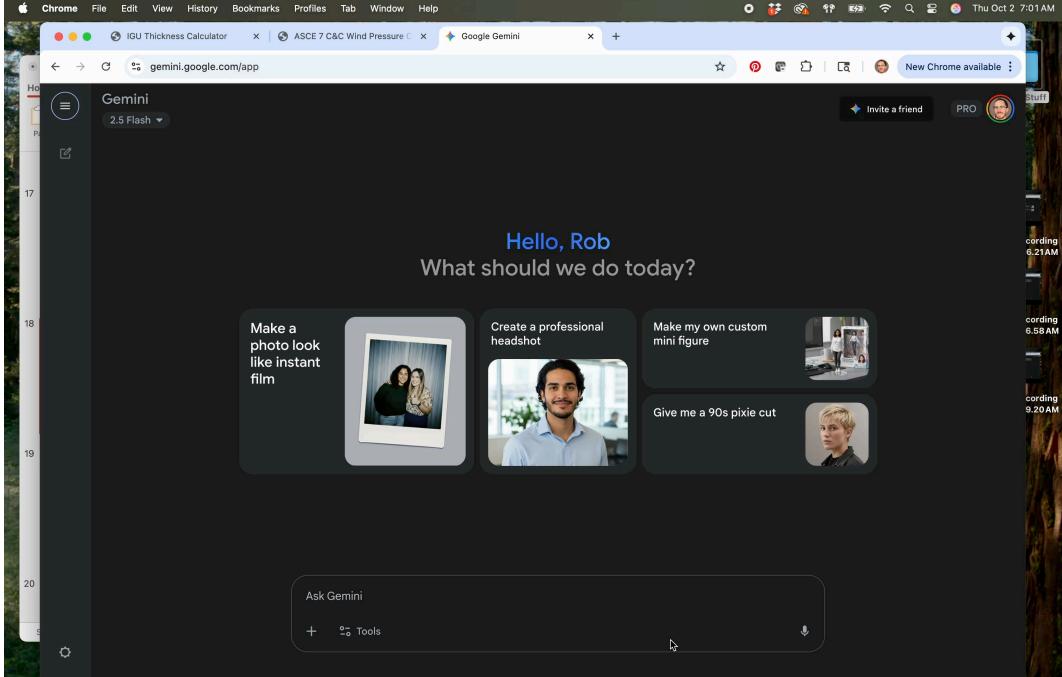












emini









Have him wearing a captains hat

Have him wearing a captains hat:

Of course! Here's the image with the man now wearing a captain's hat:

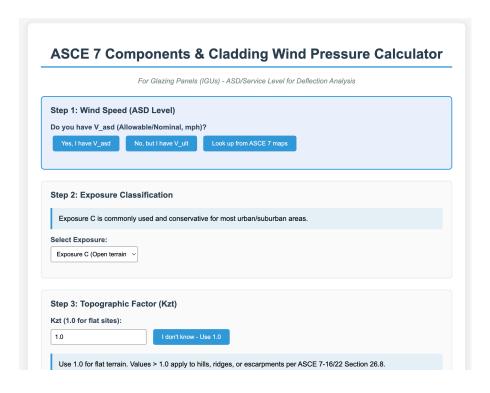
Can you also have a parrot on his shoulder

Ahoy there! A parrot on his shoulder it is. Here's the updated image:





- Will review and rewrite contracts or merge two contracts together
- Can create custom apps with simple prompts
- Computer programming in any language



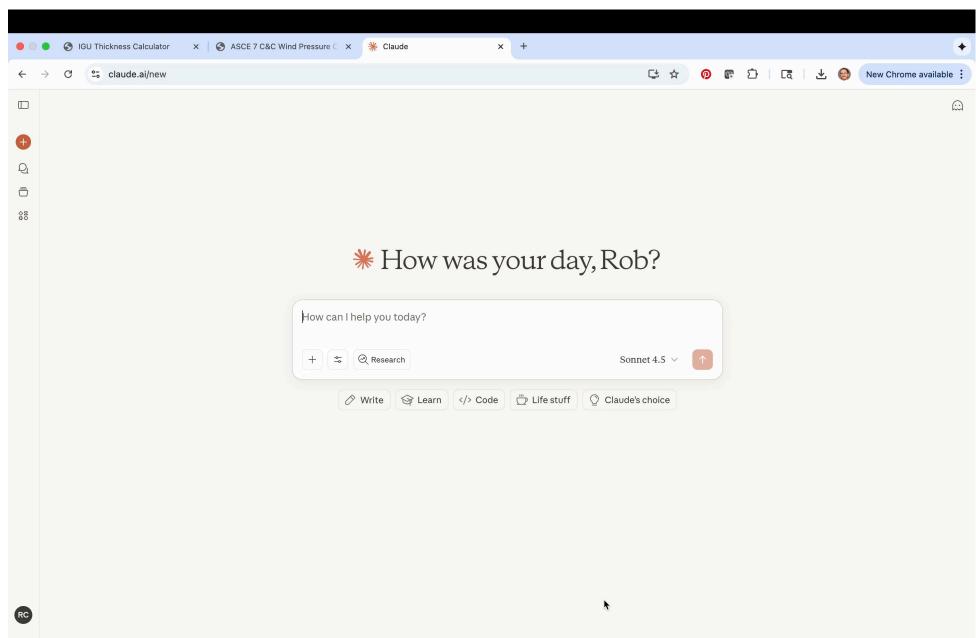




I have a presentation that I am giving on ai and using it for work and daily life and I was thinking about showing an example of how claude can be used to design a program to calculate wind load psf for glazing deflection analysis to be used by asking the user simple set of questions... This is for analyzing the glass panels themselves on a building project, not the structural frame - specifically calculating wind pressure acting on the glazing **surface.**to be used by asking the user simple set of questions and giving them the option of also saying I dont know on an option so that it can then determine a more conservative number for them. Basically asking them to tell them each of the variables you would need to calculate this windload and if they say they don't know a variable you say here is the conservative value you would use if you don't know and then at the end telling them here is the value that you could use if you were to ascertain this extra bit of info and this is the question you should go back and ask. But I want to demonstrate this in a live setting to people so I was wondering if you could help me create the prompt that I could then copy and paste into your chat box when I am doing the presentation to show them how quickly and accurately you can create this program in real time. I should also note that we are only calculating the windloads for glazing (IGUs) so it needs to be tailored to glazing windload calculations. I want the calculator to tell me in the final results the unknown variables that are driving up the load because of the conservative assumption and that if the actual result "x" is higher or lower than the conservative result it will either drive the result higher or lower. I also want to say that if I don't know the glazing location that it gives me the PSF for the various locations. Again This is for glazing deflection analysis. The glass panels themselves not the structural frame. Calculating wind pressure acting on the glazing surface using ASCE 7 rules and methodology. Use HTML and have it create the program in real time









Where They Excel



ChatGPT

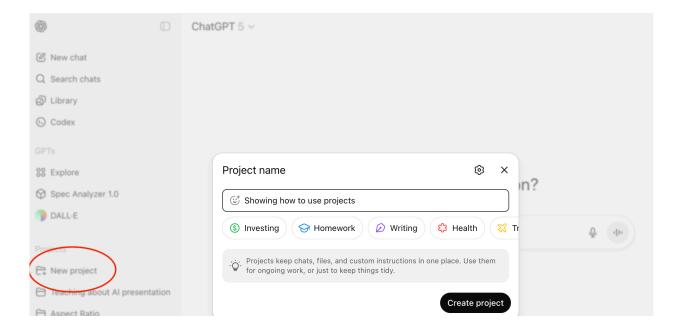
- Projects and Agents
- Image Generation
- Having a conversation
- Uploading multiple documents
- Helping Write responses, papers, technical bulletins





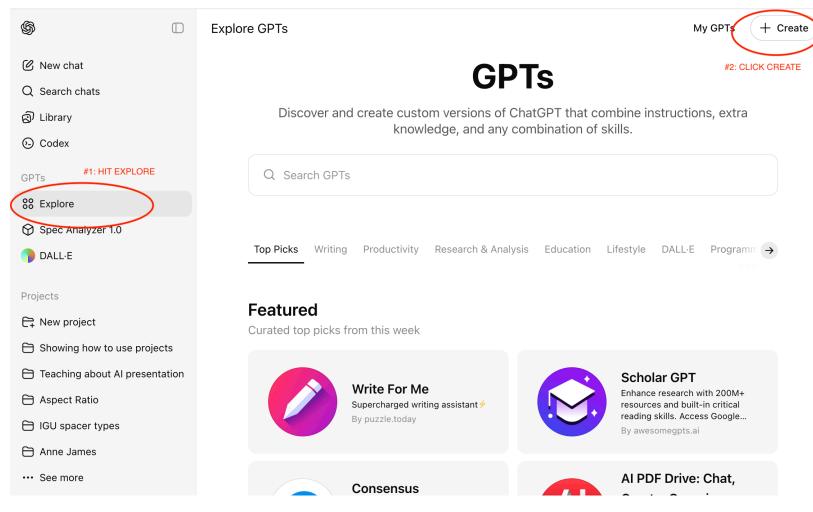
Why Create an Agent or use a custom GPT

- Why start a project, use an agent, or create a custom GPT
- Save Time and act a certain way every time
- Always work from the same data set



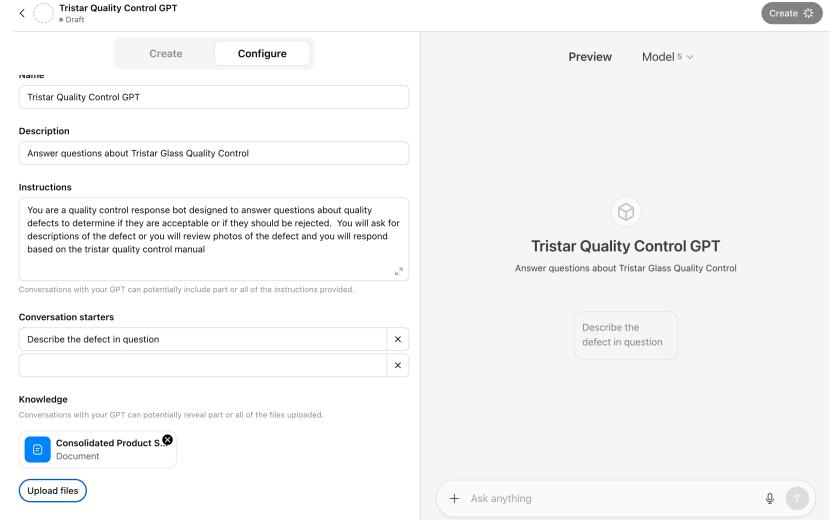






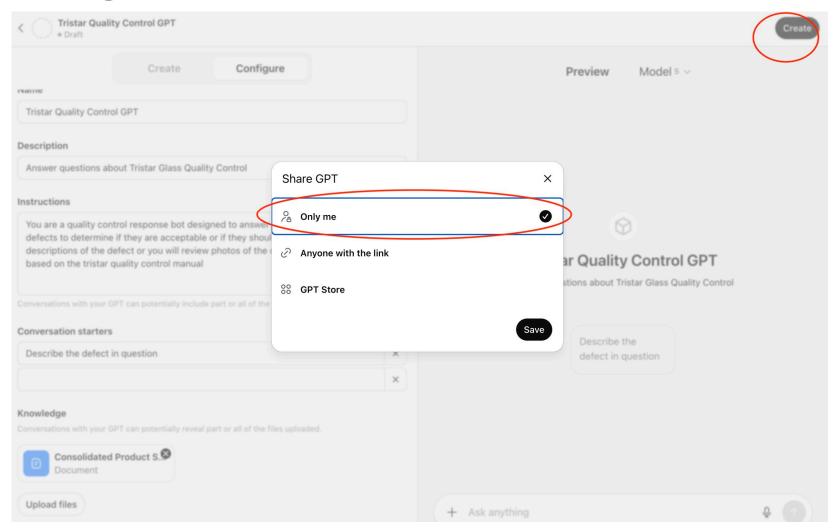
- Example: Quality Control GPT
- Feed it my quality control document
- Give it instructions: You are a quality control response bot designed to answer questions about quality defects to determine if they are acceptable or if they should be rejected. You will ask for descriptions of the defect or you will review photos of the defect and you will respond based on the tristar quality control manual





- Example: Email response bot
- Feed it a bunch of my old emails to get my tone
- Give it instructions: You are a quality control response bot designed to answer questions about quality defects to determine if they are acceptable or if they should be rejected. You will ask for descriptions of the defect or you will review photos of the defect and you will respond based on the tristar quality control document







Tristar Quality Control GPT 5 V

I have a bubble on the edge of my piece of laminated glass that is 3/16" at the edge

I checked the **Laminated Glass – Blemishes** section of the Tristar Quality Standards. For **bubbles on exposed edges**, the maximum allowable size is:

• Up to 3/16" on pieces ≥ 25 square feet.

Since you reported a bubble on the edge measuring 3/16", here's the determination:

- **Acceptable** if the lite is **25 square feet or larger**.
- **X** Rejectable if the lite is smaller than 25 square feet, because the allowable edge bubble size would then be only 1/8".

Would you like to tell me the **overall size of your laminated lite**? That will confirm whether this 3/16" edge bubble is acceptable or must be rejected.





Tristar Quality Control GPT 5 V



I see the bubble you're pointing out in the photo—it is clearly on the **exposed edge** of the laminated glass and looks to be around the **3/16" size** you described.

Based on Tristar's laminated glass standards:

- Exposed edge bubbles are allowable up to 3/16" only if the lite is ≥ 25 sq. ft.
- If the lite is smaller than 25 sq. ft., the limit is 1/8", so this defect would be rejectable.

To confirm whether your piece passes or fails, I'll need the overall square footage of





Start a Conversation



- Just Start Talking
- If at any while they are answering you start talking again they are going to stop and start listening
- Interrupt at any time
- Must physically end the chat to end the chat or they will keep going
- Can create and edit documents or emails while driving and have them read back to you and saved for when you get back to the office



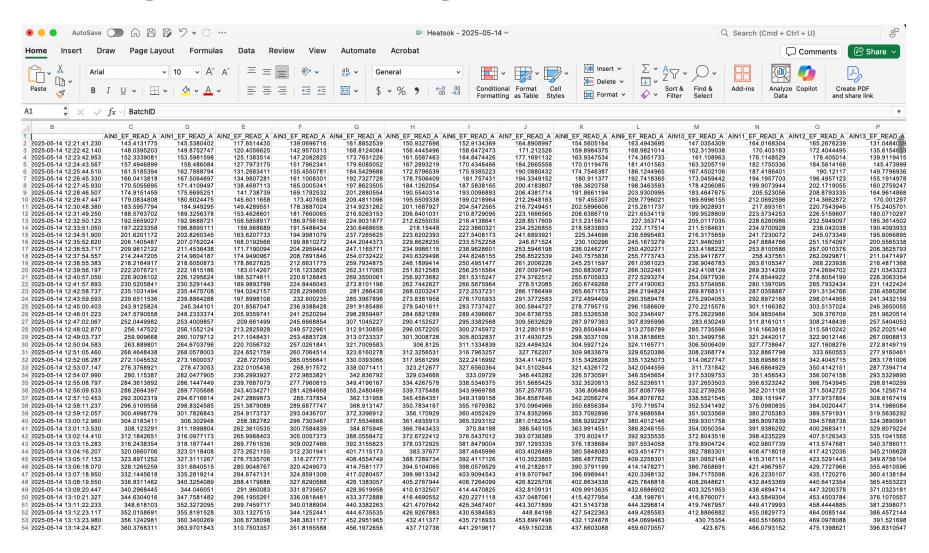


Using AI in Your Work Life examples:

- Easily Identify the Building code for a given location
- Email Rephrasing
- Tariff amounts and HST Codes
- How Do I's? What's the Bests?
- Quickly analyzing a document and Summarizing and giving feedback
- Analyzing a bunch of data
- Writing Documents

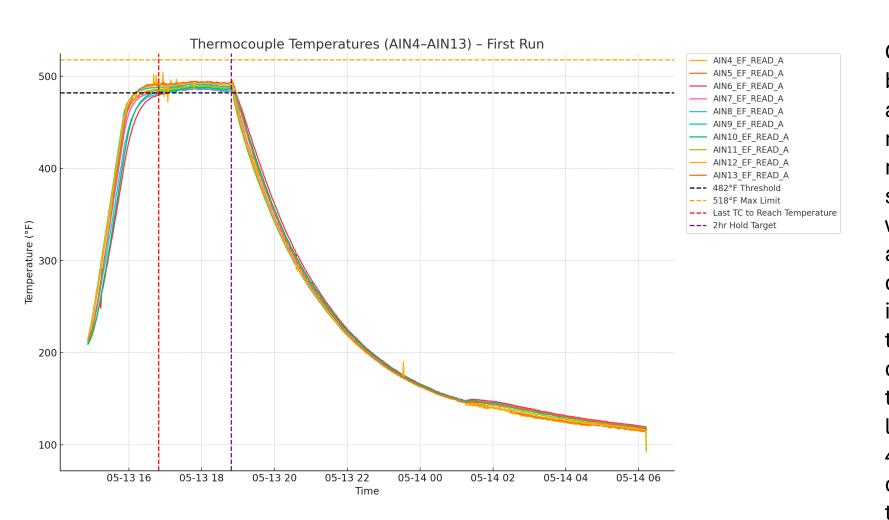


Graphing and labeling heat soak data





Graphing and labeling heat soak data



Graph the data with the Y axis being temperature and the X axis being time. Each column represents a thermocouple measuring temperature and should be a different color. I want horizontal dashed lines across the graph at 482 degrees and 518 degrees indicating the max and min temps and I want vertical dashed lines at the temperature the time that the last thermal couple gets to 482 degrees and another dashed line 2 hours after that time.



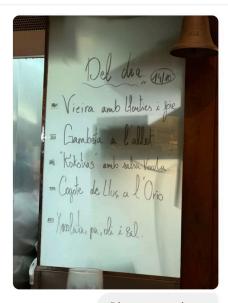
Using AI in your Daily Life

- Travel Planning
- Financial Planning
- What's the best way to cook....
- Troubleshooting
- How does this work
- Book Review and Tracking
- Asking questions while driving about outerspace



Travel Help

ChatGPT 4o v



Please translate

Here is a translation of the menu written on the board:

Special of the Day (14/10):

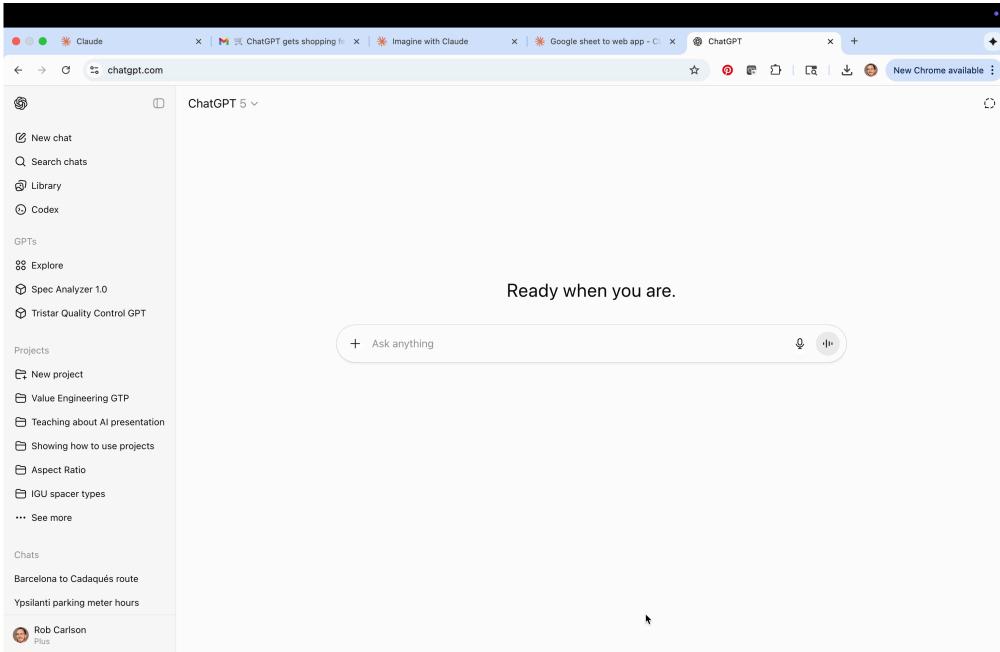
- 1. Vieira amb llenties i foie
 - Scallop with lentils and foie gras
- 2. Gambeta a l'allet
 - Small shrimp with garlic



3. Kokotxas amb salsa verda



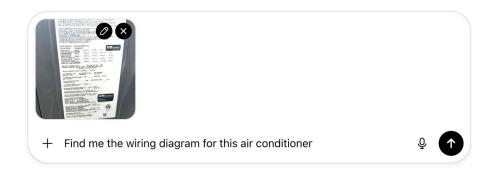
Travel Help





Trouble Shooting an Air Conditioner

Good to see you, Rob.



ChatGPT 5 V

I found a wiring diagram for the Goodman GPG14M series which should be very close (or identical) to your GPG1436060M41AB unit. The AC Outlet +2

Here are some key excerpts and tips, plus a link to the PDF so you can view the full diagram:

Key Excerpts & Notes

- The installation & operating instructions for the GPG14 series include a wiring schematic showing high voltage, low voltage, and control wiring.
- The wiring is subject to change and you should always refer to the wiring diagram on the actual unit itself (inside the panel) rather than relying solely on the manual.
- The service instructions document explicitly states: "Ensure the power supply to the compressor contactor is brought to the unit as shown on the supplied unit wiring diagram. The 24V wiring must be connected ..."

Full Diagram / PDF Link

You can view the full wiring diagrams in the Goodman GPG14M manual: "INSTALLATION & OPERATING INSTRUC \downarrow NS for A/GPG14M" — includes wiring diagrams (line voltage, control, etc.). The AC Outlet



