

What AI Does for Your Humble Construction Podcaster

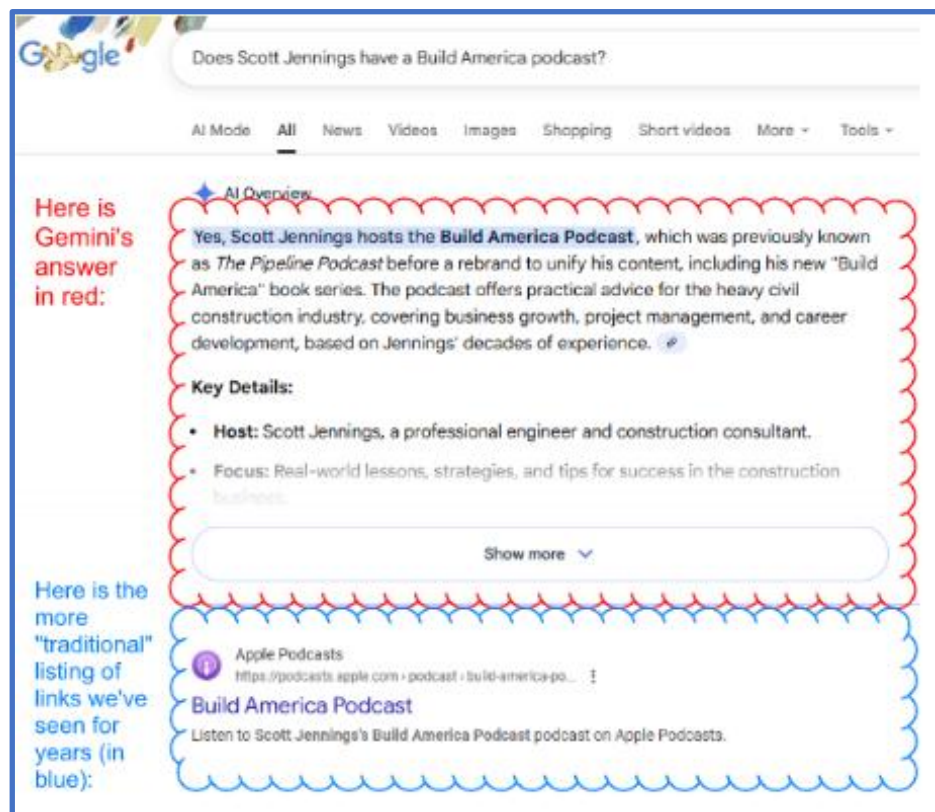
Executive summary. The construction industry has historically not been at the tip of the spear in the incorporation of technology. Artificial intelligence, or “AI”, is likely following in those same footsteps as not being immediately implemented within the industry. Here’s what AI is and where you can use it starting today.

What is the layman’s definition of AI? The quick answer is “Type any question in the box and it gives you the answer. And in more of a conversational tone than in a series of hyperlinks to websites like Google has been doing for years.”

Is Google considered AI? Technically speaking, yes, I guess Google is AI. However, this article is about the artificial intelligence that is all the buzz in the last year or two.

What are the AIs out there? There are several, but I’m just going to mention three: Gemini by Google, ChatGPT by OpenAI, and Claude by Anthropic.

Gemini I only use because when I go to Google search the first answer presented to me is by Gemini (see snip at right). ChatGPT and Claude are artificial intelligence tools that I use multiple times weekly.



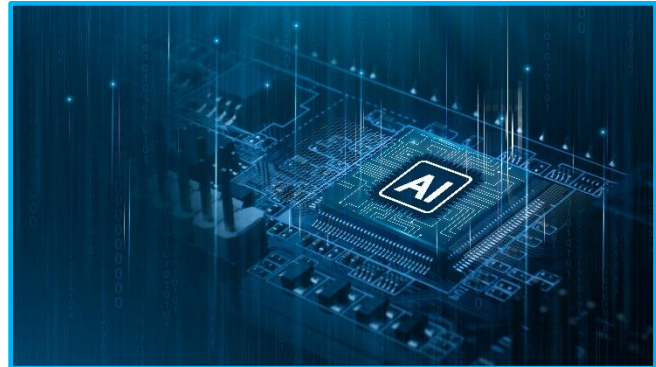
A snip of Google's answer showing that it now starts with an AI response.

A close colleague of mine who makes a living in the world of AI compared ChatGPT to your PC computer and Claude to your Mac computer. Consequently, I have been

trying to use ChatGPT for my heavier engineering/technical questions and Claude for more graphical or creative problems.

Can you give me some examples of what they do for you? You bet, here are some real world examples for the construction industry:

- Summarize a court case (ChatGPT) – I taught a class in estimating at the local university and one of the homeworks I gave out was for the students to familiarize themselves with a landmark case in the state of Hawaii (Okada Trucking Co., Ltd. v. Board of Water Supply). And summarize it for me. No problem. You can tell ChatGPT in which tone or level of professionalism you want: college senior in engineering, a law student, or a practicing lawyer for inclusion in a memorandum. Again, **YOU MUST CHECK THE RESULTS**. It is obvious that this case involved Okada Trucking Co., but one of my students stated the case was about another completely unrelated contractor (seems the prompt put in by my student was not specific enough so perhaps ChatGPT “hallucinated”).
- Read PDF boring logs and summarize (Claude) – I was consulting on a project that had almost 200 borings. I needed to know where digging was difficult (i.e. high blow count) and where the groundwater table was (again, for diggability challenges). I loaded up all of the borings in one PDF file to Claude and basically said: “Can you please tell me at what depth the blow count exceeds 40 and at what elevation the groundwater table is in all 200 of these borings? Please summarize this data in a spreadsheet by boring number, station, elevation at ground surface, depth where blow count exceeded 40, and depth of groundwater table.” The answer came out in a layout which was great, although **YOU DO HAVE TO CHECK THE RESULTS**. There were some errors.
- Read PDF of someone’s math and check it (ChatGPT) – I have an employee who generated a sketch and then provided a one page calculation for one of the pump’s characteristics. I then scanned it to myself and uploaded it to ChatGPT. Some of the math brought me back to the olden days of calculus, so instead of cracking open the textbook to relearn the math, I put it into AI. ChatGPT read his handwriting and verified the mathematics by him were correct. Again, **YOU DO HAVE TO CHECK THE RESULTS**.



- Research assistant for my Ph.D. work – I use it frequently to help me think about structure of my research, places to look for new information, explanation of complex topics, or anything. And I mean anything.
- Personal advice – I have a good friend back on the mainland who uses it for advice on her love life. No, not kidding.

And now the big question – does it cost money? Today, no (for the simple service). And today there are no advertisements. But, I just heard yesterday the ads were coming. I have paid subscriptions for both ChatGPT and Claude – I pay about \$2,600 per year. But I use this regularly for my schooling. The typical user I'd say can get by with the free version and use it until it boots you for the day; it'll let you back on the next day, or later the same day, at a designated time.

My story. I certainly would not say that I am anti-technology, but I am one to want to do things old school. I love to pull out my triangle and graph paper and get to hand sketching. But my younger staff and my students at university just do not operate that way. My mother is 78 years old and lives and dies by her iPad and recently has taken to impressing her friends with making sports predictions via, you guessed it, ChatGPT. There's an old saying that "the only thing constant is change" so you might as well adapt and try to stay young. Otherwise you might as well "get busy dying."



From the movie
*Shawshank
Redemption*,
1994.

Work safe!