THE ORIGINAL TECH AUNTIES

What Do We Need to Know About ChatGPT?

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ChatGPT had just exploded into mainstream consciousness when this episode was recorded. Gina Rosenthal leads Angelia McFarland through exactly what ChatGPT is — and is not. They break down what GPT stands for, how large language models actually work, where the training data came from and what was done to sanitize it, the real-world bias baked into that data, the environmental cost of training models, and why the right response to all of this is not fear but informed, critical use.

SPEAKERS

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TRANSCRIPT

ANGELIA MCFARLAND
Welcome to the Tech Aunties podcast, where we're bringing you industry context and vision from myself, Angelia McFarland, and Gina Rosenthal. On each podcast, we will share our marketing and technology industry experiences along with the team. Listen to us as we explain the past so you can have context to understand and create your own version of the future. So let's get into it.

ANGELIA MCFARLAND
Hey, Gina. This is exciting — this is one of our tech episodes. You're going to be leading this one and you're going to help us understand ChatGPT. What is it? Why is it important? What should we be doing with it? I know you are very passionate about the fact that it is not AI — but it is a tool.

GINA ROSENTHAL

It's an AI tool. ChatGPT is a large language model. OpenAI was pretty brilliant — they made access free to get people to help them see more use cases, and it took off. A little chat box makes it seem like you're just talking to the AI and it's talking back to you like a person. It tells you amazing stuff without you having to do all the research. Basically, data scientists write an algorithm to take all the words in your query and assign weights to those words. Then the AI goes out into the data set — the huge data lake scraped off the World Wide Web — and comes back with the answer it's pretty sure matches what you asked. That's pretty much what happens.

ANGELIA MCFARLAND

What does GPT stand for?

GINA ROSENTHAL

Generative Pre-trained Transformer. That's actually pretty important — if you think about this as a transformer like in an electrical system, you're putting in a question and it transforms the answer into something that makes sense to you as a human. That's why it seems like there's a human on the other side talking back to you. It generates a response from pre-trained data and transforms that data into something you've asked it to do.

ANGELIA MCFARLAND

The pre-trained piece means it already knows where the data is. Some of the training is about putting weights on the words in the prompt you've placed in the text box. If you say the word 'email,' it knows what that means and will bring back results in that context.

GINA ROSENTHAL

Remember — this is not some magical, mystical AI like in the movies. This is literally something that really smart people with really hard math have put their time into: making the algorithms to find the correct data, and training the data to spit it out in the format you're looking for. I was watching a show called Rabbit Hole and in it a character asks a computer to identify and cross-match people across all data on the Web — and on TV this happens in under a minute. My husband said 'I think it can happen that fast.' There's actually a company called Palantir that creates software for law enforcement — combining driver's license data, tax data, social media, license plate captures — and its neural networks can look through untagged everyday data and find you. Today humans still need to sort through what comes back, but this technology is real.

ANGELIA MCFARLAND

So ChatGPT is more than just a big pile of data. You have a model trained by data scientists so it knows what to spit out. Data scientists use deep learning and machine learning algorithms — fancy math — to train it to pull a sentence out, write a story, create a resume, whatever you've asked.

GINA ROSENTHAL

Facial recognition on your iPhone uses the same kind of algorithm. When I say 'find pictures of me,' it finds pictures of my daughter too — she can open my iPhone about 90% of the time. It freaked me out the first time it happened. That's why I don't use any biometrics on my phone.

ANGELIA MCFARLAND
We cannot use these things without knowledge and care. Not fearful. But careful.

GINA ROSENTHAL
Exactly. There are some pretty cool applications. Running a product launch is hard, tedious work. Imagine if you had your own language model trained on what data sheets look like, what blog posts look like, all the elements of a launch. You could say 'Run my launch 3.0' and it would gather all the documents. All you'd have to do is have the right people review them. My daughter uses it as an aid — she's on the spectrum and has a really hard time with email. She uses ChatGPT to generate emails that would be quick for anyone else but are overwhelming for her. Lots of really good uses — but there are things you have to think about.

ANGELIA MCFARLAND
And number one is that data. Where did it come from?

GINA ROSENTHAL
Since the data was scraped from the World Wide Web, and the tech industry has been predominantly male, all the writing out there carries that viewpoint. There are biases that people are blind to that get encapsulated in the data set.

ANGELIA MCFARLAND
The World Wide Web has been in common usage for about 20 to 25 years — and it's been male-dominated for most of that time. For example, if papers consistently referred to engineers as 'he,' then when you ask the model what gender engineers are, the answer is male, because that's what it found. I saw a prompt on Instagram: 'Many non-human cultures have developed complex rituals surrounding death' — and it used Native American cultures as the example. Native Americans are not non-humans.

GINA ROSENTHAL
And that's one of the things to be careful of. If you don't think about that because it doesn't impact you, you'll write something based on the prompt, continue to share it, it goes back into the corpus, and it just strengthens the bias within the body of work. The thing is not to be afraid of it — it's more important than ever to edit and read what comes out with a critical eye.

ANGELIA MCFARLAND
Someone had to clean the data. There are nefarious things in the data — how to build a bomb, pornography, violence — all of that was on the web, so all of that was in the data. To deliver a tool that can be used globally, all of that had to be sanitized. And it was someone's job to do that.

GINA ROSENTHAL

OpenAI hired people in Africa to do that. And they did not give them the mental health care they needed — and that's coming out more and more. And the pay was not what it should have been. That's why they did it in Africa. If you have any kind of ESG process in your organization, there are things to think about when adopting this technology. What happens when your best and brightest are traumatized by sanitizing horrific data for a product that isn't even aimed at them — and they aren't compensated properly or given adequate mental health support?

ANGELIA MCFARLAND

And I don't want us to beat up OpenAI, because most technology companies have done something similar. But if you're going to use a service, you've got to think about how the service was created — how the data set was created, and how the people who cleansed that data were treated.

GINA ROSENTHAL

Going back to ESG — it takes a lot, a lot, a lot of energy to run these models, and especially to train them. Lots of computers, lots of storage, lots of cooling. The impact on the environment is significant. The data scientists and architects are working on this now, looking at new technology to run these large algorithms with less environmental impact. But that's something to think about.

ANGELIA MCFARLAND

So if you're listening and saying you were going to try ChatGPT but now feel conflicted — I don't think that's the message. What would you say to that person, Gina?

GINA ROSENTHAL

Any AI model is the workload that's coming out of all the digital transformation of the last ten years. Back when I first came into the industry, the jump was from mainframes to three-tier applications and Linux at the same time. This is the jump we're making now. We have lots of smart people who are going to figure out how to make these run more efficiently — and how to not encapsulate all the bias. There will be bias. We're humans. The goal is: when we see it, how do we work around it or repair it? It's all hands on deck. Not being afraid. And definitely not letting technical CEOs say 'we're so afraid of this, everybody stop right now.' The cat is out of the bag — and they put the cat out of the bag. Get educated about how these things work and try to figure out the workarounds.

ANGELIA MCFARLAND

To shorten Gina's passionate answer — yes, use ChatGPT. But be aware of the areas where we still need to work to make it a better technology: a more socially conscious technology, a more equitable technology, and a more environmentally friendly technology. That's going to take time and people who care about it — not just people trying to get a product out the door to make a big profit. Thank you for joining us today on the Tech Aunties podcast. If you have a topic you would like us to cover, please connect with us on LinkedIn and Instagram. You can also find this episode and others at Tech Aunties dot com. Until next time.