Innovation for Real World Applications Using Thunkable



Nathan Burley is a scientist, both professionally and personally. For his day job as a Senior Field Services Engineer, Burley sells, installs, and provides maintenance for equipment in the oil and gas refinery industry. After hours, Burley enjoys tinkering with technology and seeing its applicability to his day job — something his leadership fully supports.

"Over the last year, I kind of persuaded my boss that we needed to start thinking quite carefully about where we're going to go next and how we're going to support going forward because new technology was coming online and we might be able to do more with less. I said, 'Let's look at getting assisted reality and augmented reality tech in the hands of the engineers because we might be able to train faster, we might be able to train better," Burley shared.

This inclination led Burley to Thunkable where he could utilize the RealWear Navigator 500 headset he uses for his day job to explore AI and see how it could improve workflow and efficiency.

Burley's first breakthrough was creating a voice-to-AI app for capturing notes from the field. The app takes a voice command, captures five seconds of audio, converts it to text, feeds the text to OpenAI GPT-3 as a prompt, and bounces the output to Google AI Community's text-to-speech API for speech synthesis.

Burley shared, "...it's incredible that this can be built with a no code solution. What happens when the headset tells me what's wrong and gives me the information I need to fix the problem?" He views this type of innovation as the next frontier of wearables.



BUILDING ON THUNKABLE

Burley doesn't have a coding background and was looking for a low code or no code solution. When he found Thunkable, he fell in love with the drag and drop app builder and how quickly he could bring an idea to life.

"For me, it's the visual, like, the visuality of the whole interface, the drag and drop," said Burley. "That's such a big thing for me. It leads to an immediacy of results which I find creates this virtuous circle, which keeps me interested, keeps me engaged, and keeps me wanting to do stuff. That visuality of the interface allows me to get more stuff done quickly and be less discouraged in the early stages. I think that's really great."

Burley loves to test and tinker. He is still exploring all Thunkable has to offer, looking to push the boundaries of what is possible with mobile app development, wearables, and accessible AI. His work has brought these three categories of technology together and he promises to keep pushing the boundaries.

WHAT'S NEXT?

Burley's Thunkable app and headset could already answer basic questions, but since succeeding with that functionality, he's been working on executing commands. His app now uses ChatGPT to convert voice to standardized JSON payloads which Microsoft PowerApps can read and use to send emails and search the company database, completely hands-free. Next up on Burley's agenda: Al agents with customizable personalities.

Burley's advice for other tinkerers who are interested in Thunkable was simple. He shared, "Do it. Don't be scared. Start small. Just press a button and have it say hello. That's really easy. Once you do that, then you'll get the feel like, 'I can do this. This is not that hard.' Then, send me a message when you get stuff going. Seriously, do it."



NATHAN BURLEY

Nathan Burley lives in Lancaster, England, and works as a Senior Field Services Engineer at Scientific Support Services, Ltd. He is passionate about the future of technology and pushing the boundaries of what AI can do.

