INSIDE KORA

Speech recognition is taking the world by storm. What is its future? PHOTOGRAPHS FROM GOOGLE.

RECENTLY IT WAS reported that over 31 million Amazon Alexa devices have been sold worldwide, on top of 14 million Google Homes. There is no doubt that speech recognition is becoming one of the most sought after features for new devices. Not only is speech recognition generally fun to use and interact with, but it is also extremely efficient for completing tasks. A main goal of innovation is to increase efficiency, especially with software. Say I wanted to start a grocery list on my computer right now. I would need to open some sort of document on my computer by using menus, type what I wanted, and then save it to be accessed later. If I had a voice assistant in my room, I'd only need to say the phrase.

It is clear that speech recognition is useful, but can its ability excel beyond that of the "home assistant"? It turns out, it can. I recently sat down with Jeremy Fischer to discuss his efforts to implement speech recognition into Autodesk's popular Fusion 360 modeling software.

The project's name is Kora, and it would help to make operating Fusion 360 even more intuitive and efficient for users, who can consist of architects and mechanical engineers. The project was started as a proof of concept for Autodesk, with four main features in mind: Save a file, Save As, rotate the

camera by any direction for any degrees in any magnitude, and to extrude certain pieces from their view. The proof of concept is now mostly completed, and Jeremy was kind enough to walk me through the creation of their software.

Their program uses a voice recognition API known as Wit, which allows them to utilize speech recognition libraries. Unfortunately this API is the source of some latency issues with Kora. The Wit API magically collects and handles voice recognition, and those instructions are sent to the Fusion 360 software API so they can be executed! Pretty incredible stuff.

But that's not all, folks. Speech recognition actually will provide Autodesk with more user data than without it. Jeremy explained that currently Autodesk records user clicks in order to reason about the software's performance and user experience. This is practically useless, however, because it is impossible to determine whether a user click was intentional or a mistake. Speech recognition will allow both the action and the intended action to be recorded by Autodesk without uncertainty.

Overall, I was incredibly impressed by Jeremy Fischer's progress with this piece of software. I think the idea carries a lot of potential, and I hope to see this implemented with all software someday. I would give this product a rating of 8/10. The idea is sound, and the four working features are incredibly important and useful. I couldn't give this product a perfect rating, however, due to the high latency. I believe this issue can be fixed, and when it does, it will be a very important addition to the Fusion 360 software in the future.