

Space technology in the daily lives of non-astronaut folk



8 months ago

Artificial intelligence, Neural Networks, Biomechanics, Spacewalks. Now add a dash of research, a bucket of testing and guess who the technological solution is made for. Your first guess would not be “My grandparents”. Most of us don’t even know what those words mean, but we do know that it is not something that we, the regular folk, can use. Well, we seem to have gotten to a place in time where some of the most complex technologies, that have been used by astronauts and professional athletes, can actually be used in the daily lives of regular people.

Meet Daniel, 67, a father of 3 and a grandfather of 1. He survived a stroke 3 years ago, and as a result suffered limitations to his most basic motor functions, he even had a hard time walking. For the past 6 months he has been using a proprietary technology that incorporates Artificial Intelligence and motion capture to help him rehabilitate. Daniel and his wife have since noticed major improvements in their quality of life. He doesn’t knock over the carton of milk when he reaches for the coffee mug. Daniel can now easily drive a car and his walking patterns have become more coordinated and efficient.

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This solution has an unusual name, it's called **Rehabunculus**. Its has been developed by a **Russia-based company IISCI Lab** and is a novel rehabilitation solution functioning in a virtual reality environment. However, the technology that has helped Daniel and his family enjoy a normal life was created with something a lot more distant in mind. This company researched Neural Networks and biomechanical parameters of the human body in order to shorten the preparation time for astronauts to embark upon a spacewalk. Also, IISCI Lab researched the same aspects together with professional athletes to determine corrections for their training regimens, on the fly, in order to improve performance. So, how did this proprietary technology, originally meant for some of the most precise and demanding circumstances, make it into Daniel's life?

A major shift has occurred in the consumer market in the past years. Large enterprises have made it their mission to develop platform technologies that are easy to use and affordable for consumers. The aim of these platform technologies is to bring some of the most proprietary technologies to our fingertips. At Vertical we are working with Samsung to enable early stage companies to develop their solutions on Samsung platforms, such as the **Samsung Gear VR**.

Startups get all the possible support one might wish for – from the professional business guidance & coaching, to ability to access the network of experts, investors and the Nordic ecosystem. All this is free of charge and equity free for startups. By making technology available outside of closed doors of research labs and instritions and bringing it to public – we support the joint goal with Samsung to bring an improvement to the quality of life to all of us, the non-astronaut folk.

The main supporter of Vertical is Samsung.

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