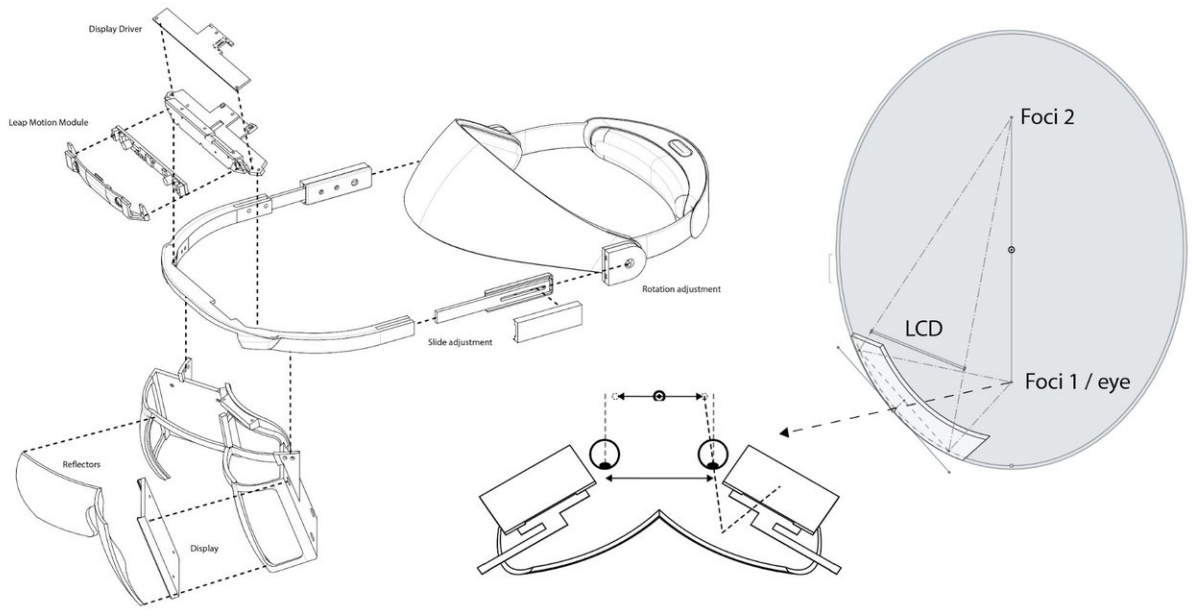
Leap Motion taking headset journey called Project North Star

April 11 2018, by Nancy Owano



Credit: Leap Motion

David Holz, co-founder and chief technology officer at Leap Motion, is staring down a big challenge in technology today. "We believe that the fundamental limit in technology is not its size or its cost or its speed, but how we interact with it."

No doubt, virtual reality and augmented reality hold great promise of new ways to interact with technologies, and that change will affect how

we think.

Holz sees us dealing with the 'virtual world' no longer as a separate sphere but part of our own.

So, "digital and physical realities" become united.

Elsewhere, people would welcome a new chapter. "I won't mince words: Despite many advances, today's VR and AR still suck," said Jesus Diaz in *Fast Company*'s FastCoDesign.com. "The former is cumbersome, requiring absurd hardware setups. The latter suffers from limited visuals and user interfaces."

Diaz reported some news. "Leap Motion, the San Francisco company that's notoriously secretive about its experimental computing technology, is debuting a new platform designed to eliminate both problems."

That is a fitting segue in which to introduce, as Holz did in a blog, Project North Star.

Holz has announced Project North Star, which "allows us to chart and sail the waters of a new world, where the digital and physical substrates exist as a single fluid experience."

What's involved in this project? It has an AR headset. There are two displays, 1,600×1,440, pushing 120 frames per second, with a visual field over 100 degrees.

> Introducing Virtual Wearables pic.twitter.com/LPvknKBlnO
>
> — Keiichi Matsuda (@keiichiban) March 22, 2018

Another factor is "a new UX philosophy that seeks to achieve the Holy

Grail of the industry: a truly natural mixed-reality computing paradigm," said Diaz.

The "North Star" is an open source reference platform, Diaz said, for the hardware and UX design. *Tom's Guide* Andrew Freedman on Monday referred to the project as an AR developer kit, "with open source hardware and software to make cheap headsets with accurate hand -tracking on board." How cheap?

Holz said the design of the North Star headset was kept fundamentally simple – under one hundred dollars to produce at scale.

That, Freedman said, could mean "very affordable AR headsets."

Diaz used the word "skeuomorphism" as the way to describe what's going on.

"Skeuomorphism is where an object in software mimics its real world counterpart," according to the Interaction Design Foundation.

Diaz went on to explain their notion of giving you "Power Hands."

They decided to embrace the "physicality" of augmented reality, where you can create virtual representations of familiar objects that can help users access powerful features in an intuitive way. Their research evolved into a feature of North Star they call "Power Hands."

Power Hands, according to Keiichi Matsuda, creative director at Leap Motion, give your hands superpowers. With each type of Power Hands app, you accomplish a different hand task, such as grabbing a virtual object, rearranging it, or painting in the air with your fingers.

Virtual Wearables help the person access abilities provided by Power

Hands. Think gadget around your hand or wrist that looks real but is virtual.

Diaz said, "Virtual Wearables look and act like familiar interfaces. Users can click, open, twist, turn, or swipe them, just like they would in real life."

What's next: Expect more blog posts, more videos, and a call for good minds who do good things with open source.

Android Central said, "Leap Motion is hoping it'll serve as the starting grounds for upcoming AR hardware and software development."

Holz said, "this is an experimental platform right now, and he said that (at the time of this writing) "next week we will make the hardware and related software open source."

Holz said they hoped designs will inspire experimental AR systems that will shift the conversation "from what an AR system should look like, to what an AR experience should feel like."

More information: blog.leapmotion.com/northstar/

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