

By

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As a UX consultant, I love being exposed to new products and services. At Blink, I've had the opportunity to work with some incredible clients including HP, Oculus, and Microsoft. Working with innovative companies is a UX consultant's dream.

Thanks to the professional development fund Blink provides its employees, I was able to attend CES and experience the thrill of Augmented Reality (AR) and Virtual Reality (VR) for myself. After conducting so many studies involving emerging tech, I really wanted to see how the technological advancements we test so often perform in the real world.

CES is a giant conference spanning multiple hotels and the Las Vegas Convention Center. There's no way I could capture everything, but I wanted to share a few of my favorite exhibits.

AI is everywhere

As consumers, we are getting more and more familiar with Artificial Intelligence (AI) because it's integrated into so many of the products that we use every day. From smart speakers with virtual assistants like Google Home and Amazon Echo, to driving directions on Waze that respond to traffic accidents, or personalized recommendations on Netflix, AI has already penetrated our daily lives.

So, perhaps it's no surprise that AI is behind so many of the innovations I saw at CES this year. One of the most innovative uses of AI that I saw was the smart security camera by Puppy. Their AI-powered security camera can identify known and unknown entities and display metrics regarding the person screened by the camera on a real-time dashboard. The camera is able to

read facial attributes and analyze other traits, including age and gender, to mitigate concerns property-owners have about intruders.

Puppy's smart AI security camera and dashboard

Augmented Reality finally has practical use

Most AR applications with which I'm familiar rely on a phone with a rear- or out-facing camera. Experiences like Pokémon GO and Google Translate enhance the world around us. The newest trend may be the augmented self. I saw so many AR experiences that were embedded into mirrors or relied on a front-facing camera. There were several compelling examples of this at the show.

Tech giant Panasonic demonstrated a smart mirror that incorporates AI and AR in real time. Their "Physical Sensing Mirror" scans people and uses facial recognition technology to guess their age, gender, heart rate, and even their current emotional state. These metrics update constantly as the user changes their posture, facial expressions, and so on.

I thought the demo was pretty successful at showing how the technology could be useful in the home, workplace, or public space.

LG took a more specific angle to their demo. The AR Smart Mirror demo showed how AR embedded in a mirror could work in the context of shopping. Users can stand in front of the mirror while the camera scans them and reports their measurements. Users can even "try on" and buy new outfits using the touch-screen interface.

Building on that idea were beauty brands Ulta, Coty, and Wella. These companies are all leveraging technology by PerfectCorp, the makers of YouCam, which debuted at CES 2014, to power smart mirrors that let users try out different makeup, hair colors, and hairstyles.

I'm excited to see how merchants integrate these new capabilities into their storefronts or e-commerce experience.

LG's AR Smart Mirror

Virtual Reality gets even more immersive

Virtual Reality (VR) accessories for gaming and entertainment were everywhere I looked. Dozens of companies were demonstrating what they've been working on at CES 2019. These VR accessories not only sought to expand the capability and the potential of VR gaming, but also cater to audiences who are challenged with accessibility issues.

One of the best VR exhibits I saw was Teslasuit. Their full-body haptic VR suit got a lot of attention, in part because it's reminiscent of "Ready Player One." This smart suit pairs with a VR gaming system, such as HTC Vive or Oculus Rift, and allows the user to feel the digital environment temperature change. It also collects biometric data from the user. I've got my eye on Teslasuit. They have the potential to level up the entire VR experience.

A common challenge facing VR is the amount of space required to accommodate a VR gaming

system. So, of course there are new vendors trying to solve that problem. 3dRudder is a foot-motion controller, currently available for purchase, that the VR gamers can use with their PlayStation VR system. The player remains seated and places both feet on the controller to control their virtual movement. The gamer can move forward, backward, left, right, and rotate while remaining stationary. The introduction of this kind of VR gaming accessory is important because gamers with mobility challenges (who have use of their feet) can finally enjoy the immersive world of VR.

Cost is another factor that has held VR back from the mainstream. Antilatency specializes in VR position tracking; their products make creating location-based VR installations for virtual arenas or mazes easier and more affordable. Their products can be attached to VR headset devices, like Oculus Go, and body parts, like the user's hands, to allow object tracking, full body tracking, and easier location setups for gaming and other purposes. It allows building warehouse-scale gaming environments at a lower cost compared to their competitors.



Demonstration of 3dRudder, a VR foot motion controller

Viva, Las Vegas

Attending CES gave me a newfound appreciation for just how quickly technological advancements are being made. The opportunities for technology to enhance our lives, every day, have perhaps never been clearer to me than while walking around the show floor.

It seems like AI is being embedded into every new product. Augmented reality might have finally found a niche that cements it as a helpful and practical solution. And virtual reality is getting cheaper, more accessible. Maybe next year, I'll be able to attend CES virtually. That would be cool.

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