The 3D scanning app Qlone is set to unveil the second version of its award-winning software at CES 2018. (Photo: Qlone)

5 cool Israeli innovations to see at CES 2018

From autonomous vehicle technology to advancements in augmented reality, Israeli innovation is ready to make a big splash at CES.

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by Michael d'Estries

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The Consumer Electronics Show, the self-promoted "global stage for innovation," is once again poised to capture the imagination of the world Jan. 9-12 in Las Vegas. While more than 4,000 companies will be exhibiting at this year's conference, showing off advancements in everything from **virtual reality** to **robotics**, we've decided to focus on five from **Israel, known as a world leader in startups**.

What will the future of **autonomous vehicles**, **augmented reality**, **3D scanning** and vision enhancement look like in the coming years? Scroll down for brief peeks at the digital breakthroughs on the verge of transforming our everyday lives.

Breakthrough autonomous vehicle chips from Valens

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Valens Semiconductor will unveil a chip for smart cars 20 times more powerful than anything currently on the market. (Photo: Valens)

With automakers shifting to **so-called "smart cars"** loaded with displays, sensors, cameras and other systems, the underlying network tying this high-tech infrastructure together is increasingly under stress from digital traffic jams. Enter Valens Semiconductor, an Israeli chipmaker focused on building new superhighways for smart car technologies to communicate over.

Based in the city of Hod Hasharon along **the shores of the Mediterranean**, Valens is set to demonstrate a new chip for smart cars at CES 2018 that is reportedly 20 times more powerful than anything currently on the market. Whereas the most advanced smart cars leverage digital transmissions of 100 megabytes, Valens' new infrastructure is capable of accommodating up to 2 *gigabytes*. This advancement will allow smart car engineers to not only add more sensors to their vehicles, but also transmit uncompressed, high-definition content to the driver and passengers.

In addition to its CES unveiling, Valens is also engineering chips capable of providing digital highways for up to 12 gigabytes of information.

3D scanning from EyeQue
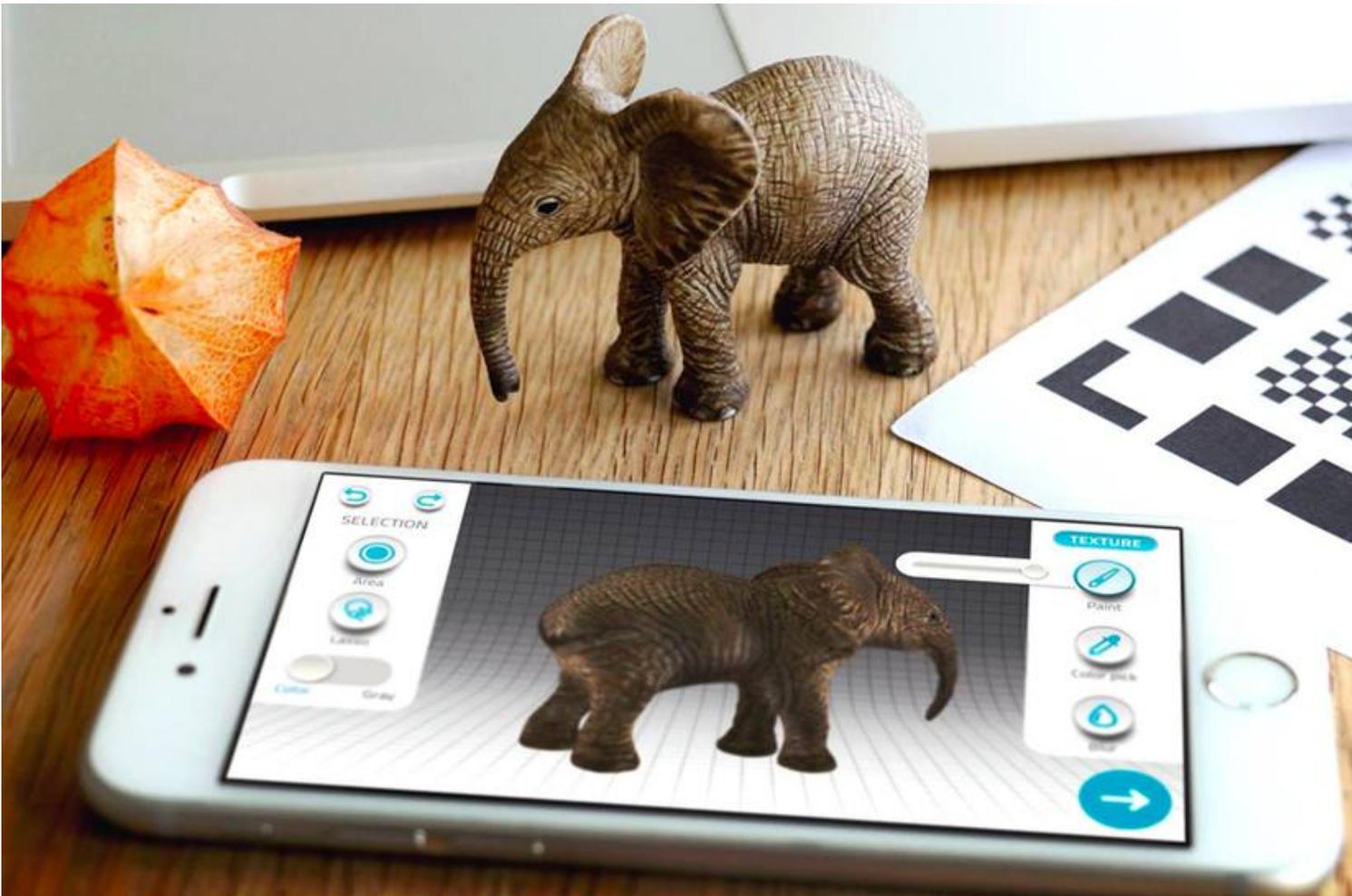
Qlone's 3D scanning tool for the iPhone gives designers a powerful app for creating digital models of real-life items. (Photo: Qlone)

Ever wish you could capture an object in the real world and have it instantly turned into a 3D model for use in your digital workflow? What if we told you it was not only possible, but also easily managed using nothing more than your iPhone?

Qlone, from EyeCue Vision Technologies, is a smartphone app that leverages your camera to pull off a 3D scan of small objects. Simply print out the guide mat, place your item in the middle, and follow the instructions on your phone. Within minutes, you'll have a 3D digital representation of the object that can be used in anything from augmented reality apps to video games.

Based out of Yokneam, Israel, at the foot **of the gorgeous Carmel Mountains**, EyeCue plans on showing a new version of their Qlone software at CES 2018.

Augmented reality from Lumus

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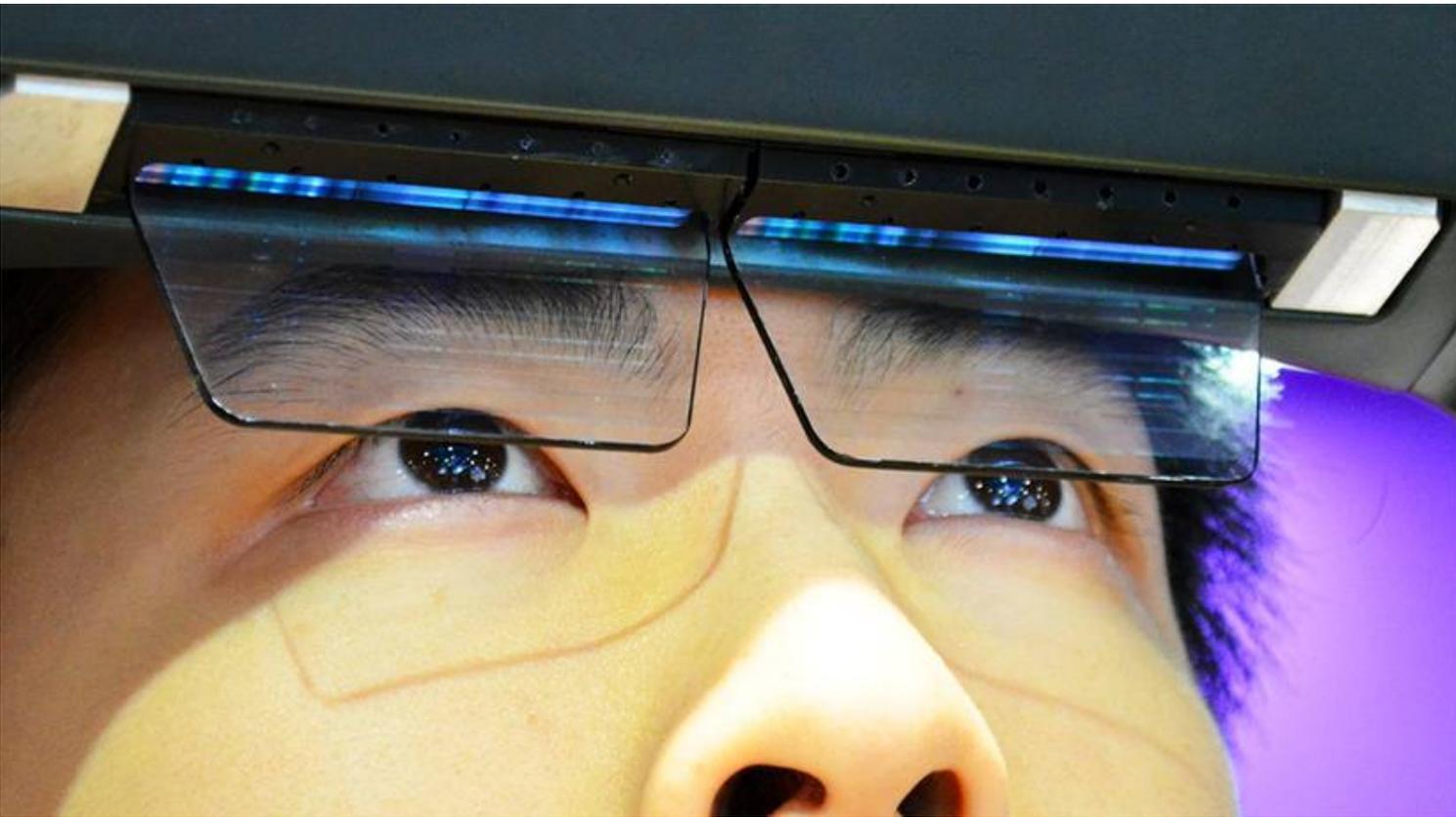
Lumus has developed AR glasses capable of displaying a 55-degree field of view from optics less than 2mm thick. (Photo: Lumus)

Lumus, an optics company that engineers transparent displays for augmented reality systems, is aiming to once more make a splash with its groundbreaking tech at CES 2018. The company, based in central Israel, recently made headlines after signing a deal with Quanta, a major supplier of components for Apple, to significantly expand its production of augmented reality hardware. The goal, according to Lumus CEO Ari Grobman, is to make AR glasses less than the cost of a smartphone.

"This is truly a historic deal," Grobman added. "In years to come, when we look back at the major events along the timeline toward mass adoption of augmented reality, we believe this will be recognized as a pivotal moment."

Lumus' lightweight, compact glasses – described as "non-dorky" by Grobman – allow for rich, full-color images, even in bright sunlight. Unlike **Microsoft's Hololens**, which currently only accommodates a 30-degree field of view, Lumus has engineered lenses that project across 55 degrees.

Foresight's autonomous vehicle vision system

In an effort to improve the safety and obstacle detection of semi-autonomous and autonomous vehicles, Foresight will unveil their groundbreaking Quadsight vision system at CES. According to the Israel-based company, the four-camera system will allow for near-100% obstacle detection with near zero false alerts under any weather or lighting conditions – including complete darkness, rain, haze, fog and glare.

"At Foresight, we believe that a car's vision system should be nothing less than perfect," said CEO Haim Siboni, a graduate of Ben-Gurion University. "Vision is the foundation of passenger safety, and vision perfection under all weather and lighting conditions is clearly the breakthrough that vehicle makers need to build consumer confidence in order to accelerate autonomous vehicle adoption."

Foresight will provide an in-car demonstration of their Quadsight vision system as CES. The company hopes to begin pilots of the groundbreaking tech later this year.

Sight enhancement eyewear from ICI Vision

ICI Vision's digital eyewear uses artificial intelligence and hardware to help those with vision disabilities better gauge their surroundings. (Photo: ICI Vision)

ICI Vision, based out of **Tel Aviv**, will be demonstrating their EVE (Enhanced Vision Engine) glasses at CES 2018. The high-tech eyewear is meant to help those with vision disabilities better navigate their

surroundings. To help correct blind spots, the glasses use a combination of HD cameras and artificial intelligence to fill in the gaps and project images onto the healthy parts of the retina.

"ICI Vision's mission is to enhance and optimize human vision by developing the first of its kind individually optimized digital eyewear platform," the company said.