

Connected, connected, connected.

Brace yourself for what may well be the most overused word at CES 2018. From the world's **Cities** to the **Cosmos**, all will be **CONNECTED** at this year's big show.

Indeed, 2017 marked the 50th anniversary of CES and – with CES 2018 approaching – technology appears to be on the verge of making some of our sci-fi dreams come true.

At CES 2018, you can expect a considerable emphasis on VR, 360, AI, connected homes, smart cities and seamless "human integrations" of technology. In a world where any surface can be a screen and virtually any object can be made "smart," expect CES presenters to wring their hands over the implications of so much always on-ness. We are likely to be left with as many questions as answers, but debates over AI boundaries and ethics and cars in space will surely make for a provocative week.

Here's a peek at what we expect to be hot at CES 2018.





Connected Cities

In 1950, only 30% of the world's population lived in cities.

By 2014, that number had reached 54%.

By 2050, two-thirds of the world's population will live in cities.

Urban growth (or urban sprawl, depending on your point of view) creates opportunities to connect vast amounts of data with people, devices and physical infrastructure. The ability to process data in such densely-populated areas may depend upon 5G technology. 5G (fifth generation wireless) is a new network system that boasts much higher capacity and speeds that are 10x faster than 4G LTE. The applications for video streaming, VR gaming and self-driving cars, for example, are significant.

In addition to broadband, <u>PSA's Push to Pass</u> and <u>Smart Bosch Solutions</u> are just two examples of company initiatives leading the way toward the connecting cities of the future. Both organizations are concentrating on mobility, with Bosch focusing on integrated information and booking platforms for mixed-mode transportation, e.g., car and bike sharing, public transport and parking spaces.



With 39% of consumers agreeing that their over-crowded cities need a network for drones and flying vehicles, a number of companies have announced initiatives that may produce flying cars in our lifetime. Uber, for example, hopes to pilot its own <u>aerial taxi service</u> in Dallas-Fort Worth, Dubai and Los Angeles by 2020.

Connected Cars Get Fancy

After years of associating health monitoring with wearable devices, auto manufacturers are installing health and wellness features into vehicles.

Ford, for example, is testing an ECG monitor built into the driver's seat. Why? Because one-third of its European customers will be 65 or older by 2050, and older people are more likely to have heart problems. Couple this with the fact that drivers are now staying behind the wheel far longer than they used to, and you get a situation that is potentially hazardous for the driver and those near the vehicle.

What if a medical service could remote dial in to recommend the driver pull over? Or what if the car could be programmed to take over based on the driver's heart rate? These are examples of technology delivering true human benefits.



Toyota's latest autonomous vehicle features better sensors, improved detection and two steering wheels to enable a change in control between humans (or perhaps between human and robot).



Auto parts maker <u>Continental</u> will showcase an inductive charging system that enables fully-automated electric car charging without cables. Your car would be able to pick up small amounts of charge wirelessly wherever you go, alleviating the stress related to finding specific charging stations while on the road.



The Rinspeed Snap offers a generic, wheeled platform upon which a whole bunch of vehicle bodies could be snapped in or taken off. Caravan today, sports car tomorrow. Who knows?

Connected Content

In addition to the never-ending arms race in television size, flexibility and weight, 8K resolution is likely to have implications for video production and the viewing experience (once prices approach the land of reality).

There is also something you may hear described as "Television 3.0," defined as whatever comes out of a blender containing Netflix, Amazon, the Internet TV app, cable packages and viewer platforms like Roku. How are media, advertising and technology companies positioning themselves around "the set?" As you walk the floors, keep this question in mind.

2017 saw considerable improvement in voice control and interaction, and 2018 is likely to bring additional interactivity in this area. The Amazon Fire TV Edition, for example, allows you to say "Alexa, turn on Fire TV," or "Alexa, watch 'Breaking Bad' on Fire TV" and have the TV react without a traditional remote. Vizio and Sony TVs can already perform similar tricks with Google Home speakers, and Sony's Android TV has an Alexa app. Suffice it to say that most consumers can't keep all the features, "skills," manufacturers and product names straight, but marketers are looking to lock up category exclusivity. Nevertheless, it will take another year or two for the real winners to emerge.



Keep an eye out for 8K resolution



Amazon Fire TV



Google Home

Connected Cosmos

Las Vegas can <u>feel</u> like outer space, don't you think? What's certain is that space is becoming a big part of the CES conversation, with everyone racing to deliver the first real or imagined experiences.

WorldView promises "a journey of a lifetime aboard a comfortable, stylishly-appointed spacecraft." Whose lifetime they are talking about remains to be seen, but the company's CES presence is likely to blow your mind.

<u>SpaceX</u> wants to launch its first cargo mission to Mars in 2022, and we expect a big showing at CES (thanks to VR).

Motiv Space Systems is currently developing the Primary Robotic Arm for NASA Jet Propulsion Laboratory's Mars 2020 Mission. This 5 degree of freedom arm has a reach of over 2 meters and a payload capacity of 45 kilograms. The arm will deploy multiple science instruments for surface exploration.



If you're not quite ready to get shot into space, try these for more down-to-earth experiences:







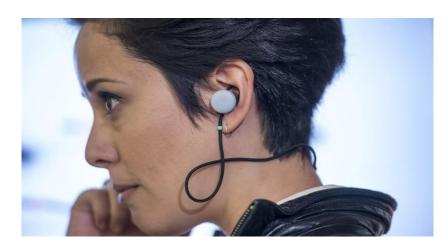
LittleBits Droid Inventor Kit

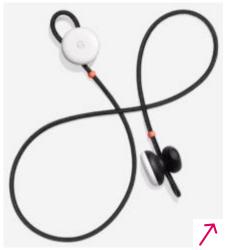
Connected Consumerism

Finally, we look forward to checking out this year's best new consumer technology products. Keep your eye out for the innovations that sync with your mobile device.



Haptic technology enables tactile and kinesthetic inputs and feedback through vibration, force, heat, etc. We expect to see new consumer products that leverage haptic features.





Augmented hearing is another arena in which we're likely to see innovation. Virtual sound is capable of giving users simulated experiences that generate real emotional reactions. Or imagine a private sound cloud in which only you could hear.

Google's new Pixel Buds provide real-time language translation. This functionality could not only transform your next vacation, but enable a brand to seamlessly deliver a message wherever the wearer may be.

#MEDIACOMCES

Get ready for CES 2018

Follow MediaCom on social for real-time observations and highlights.

<u>Twitter</u> (@MediaComUS) <u>Instagram</u> (@MediaComUSA)

There will be plenty to learn at CES this year, with Al likely to be the star. How do we know? Take a look at just four of nine of CES' major conference sessions:

Al and Analytics: Creating Compelling IoT Services

Designing Al-Powered Robots

How AI is Changing the World

Turning AI into Dollars

QUESTIONS?

Contact your MediaCom@CES team anytime at ces@mediacom.com

Stephanie Fierman

+17185368157

Sara DeViney

+1 347 583 9454

Brenna Kolomer

+19176983868

If you're making the pilgrimage, get some sleep, take your vitamins and check out these resources:



CES Tech Talk Podcast

www.ces.tech/Events-Programs/CES-Tech-Talk-Podcast.aspx



CES 2018 Innovation Awards honorees

https://www.ces.tech/Events-Experiences/Innovation-Awards-Program/Honorees.aspx



Sneak Peek of CES 2018

https://www.youtube.com/watch?v =gDe_WKVShJg



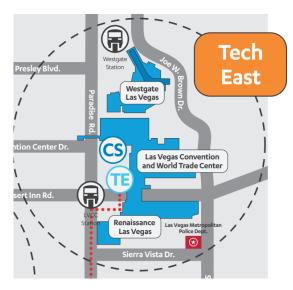
CES App

Exhibitor list, full conference and event schedule, speaker list and important show information.

www.ces.tech/Logistics/CES-App



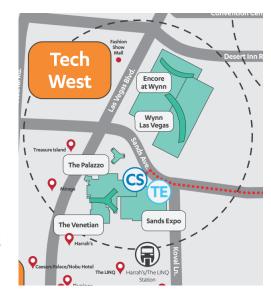
Get ready for CES 2018



Tech East

Where? Las Vegas Convention and World Trade Centre, Westgate, Renaissance.

What? Where innovations in audio, drones, gaming, augmented and virtual reality, vehicle technology, video, wireless devices, wireless services, digital imaging/photography or anything "i" come to market. It's also home to many international exhibitors.



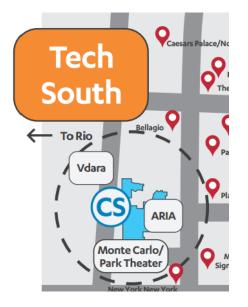
Tech West

Where? Sands Expo, The Venetian, The Palazzo, Wynn Las Vegas and Encore at Wynn.

What? Features players in emerging technology and high growth areas including fitness and health, the Internet of Things, wearables, smart home and sensors.

Download full CES map here

www.ces.tech/Show-Floor/Locations



Tech South

Where? ARIA, Park MGM, Vdara and Monte Carlo.

What? The CES epicenter for the advertising, content, marketing and entertainment communities, hosting a variety of C Space activities, including conference sessions, networking events, exhibits and hospitality suites.