2016 CES Coverage: The Ten Biggest Self-Driving Car Stories

While the annual CES Convention held annually in Las Vegas actually stands for “Consumer Electronics Showcase,” over the course of the past few years it has been automakers that have literally taken over the event as their own as a means to show off their latest hi-tech hardware. And 2016 took that to an even further and sometimes outrageous level seemingly with every automaker hoping to put on a better show than their competitors.

And what, pray tell, brought the likes of Ford, Audi, Kia, BMW, General Motors (the list goes on and on) to not just the now far too cramped Las Vegas Convention Center? Really, the convention center in Las Vegas can’t hold every exhibitor plus have room for other humans to walk around so many events were held miles apart at different hotels across the city. Thank goodness Las Vegas has an elevated monorail that speeds up travel somewhat. But it did make us long for less walking, perhaps even a car that could drive us wherever we wanted to go without having to think about anything at all.

Yes, CES and the inherent difficulty transporting oneself from point A to point B were the best demonstration to us of the benefit of the self-driving automobile. Some call them autonomous, some say robotic cars while still others like a very vocal Consumer Watchdog group that seems quite opposed to the idea of a vehicle with no human control override in the event of a computer system failure. But we will talk more about that later after we show some of our favorite technology that may take some of the control away from drivers but that could also potentially save their lives.

The Audi that is “Piloted, Electrified and fully Connected.”:
Audi yet again has put the concept of the automotive interior on its ear with the 2016 CES debut of its SUV e-tron Quattro Concept. Handsomely styled, this fully electric SUV has a 310 mile range and if produced as expected starting in 2018, this vehicle will mark the debut of Audi’s revolutionary zFAS system of sensors, radar and laser technology to enable many modes of autonomous driving capability.

The interior of the SUV features what Audi calls a “virtual dashboard” which allows the driver to program the cutting edge active-matrix organic light-emitting diode displays to project practically any information or function he or she may desire including connectivity with fourth generation Apple TV. What? Of course people will want TV in their cars if they aren’t driving. We are only humans.

Kia’s new driverless Soul demonstrates high speed capability at the company’s racetrack to mark the debut of its driverless car sub-brand Drive-Wise:

South Korean automaker celebrated getting approval from the state of Nevada to test autonomous driving technology on its roads by inviting journalists to go for a ride in one of their driverless Soul vehicles at their local testing grounds. The driverless cars were able to come to the “driver” and stop right in front of them and when everyone was inside the cars then it performed all manner of maneuvers at speeds up to 74 miles per hour.

Kia has promised to have a wide rollout of autonomous vehicles by 2030 and is so convinced of the importance of this technology that they plan to roll-out a sub-brand for such models called Drive-Wise. Kia will also roll out new safety technology under this brand umbrella including an emergency stop system which brings the car to a halt if the driver falls asleep and a Preceding Vehicle Following system which monitors the vehicle in the lane ahead and can decide for the driver to brake and accelerate accordingly.

General Motors introduces new electric car that is truly affordable:

GM’s newly anointed Chairwoman Mary Berra used CES 2016 as the place to unveil the production ready Chevy Bolt all-electric car which will have a 200-mile range and be priced under $20,000 after government rebates. Not only does the Bolt seem to have all the markings of a winner for General Motors, it may be one of the first vehicles made by the company with autonomous driving capability. General Motors and many industry pundits expect that by 2030 15% of all cars sold will be driverless. So will those cars be smart enough to know how to avoid other human drivers?

Ford Promises driverless cars by 2020 but makes no mention of tie-up with Google:
Although when asked directly if Ford was partnering with anyone in its development of driverless cars CEO Mark Fields said a definitive “yes,” he did not mention the long rumored Google partnership that could see affordably priced Ford driverless cars on the market by 2020. Ford did, however, show off a laser radar unit the size of a hockey puck which makes it now possible to attach these “eyes” for autonomous cars into the side mirrors of a car. Before this most autonomous cars on test mounted the large and bulky laser radar onto the roof. A big step forward from Ford.

Volkswagen debuts new Gesture Control Technology:
Now if you loathe the thought of having to pilot a vehicle yourself, doesn’t it stand to reason you don’t much care for any unnecessary movement of your body to control other in car features? We all know leaning over to reach a button can be murder on your back. In all seriousness, however, much of this gesture control technology will revolutionize how the dashboard in your car of the future will have to look and will definitely mean far less clutter and fewer buttons. We are just waiting for a dashboard that can read our minds and carry out our wishes accordingly. We can dream can’t we? Speaking of that.

Chinese company Ehang introduces first driverless flying drone capable of carrying passengers:
We have all seen the remote control drones that some claim may soon be delivering packages to your door but currently are little more than remote control flying toys for adults. But Chinese company Ehang saw the unique potential of the drone concept and created Ehang-184 drone capable of carrying one human passenger. To control the Ehang-184 you simply download the smartphone app and use it to program your destination into the on-board computer which then will handle take off, flight and landing while you relax inside. Kind of scary but a very appealing way to avoid traffic.

Microsoft and Harmon International are working together to put Windows Office 365 into driverless autos making them into mobile workplaces:
For some this is their worst fear realized—being forced to work even on their commute home from work in the car. Harman and Microsoft are working together to make it possible for people to access Microsoft

Office functions through their Infotainment Systems and the availability of this feature will undoubtedly be available widely long before driverless cars are a normal sight on the road. Until then, many features would only be usable when the vehicle is parked but it is still one step closer to people driving around in their offices

Autoliv Safety demonstrated technology for automobiles that will bridge the gap between the fully autonomous automobile and the driver assistance aids of today:
Autoliv is one of the largest and foremost suppliers of active safety technology in the auto industry working with nearly every automaker in some form or another. At CES Autoliv did active demonstrations of a number of its current active safety technology as a portent of how research into such devices will lead to the perfection of the driverless car. For example, Autoliv debuted the Neonode zForce Intuitive Steering wheel which helps eliminate driver distractions and can transition from autonomous and manual driving modes in a truly seamless manner.

Recently we were allowed a week with a 2016 BMW X5 with their advanced Night Vision technology which allows the driver to see traffic hazards and the heat imaging given off by living beings. The third generation of Night Vision which is available as well on certain Audi, Mercedes-Benz and Rolls Royce models was demonstrated by Autoliv at CES 2016.

Our test BMW X5 also featured the firm's next generation spotlight beam technology which illuminates pedestrians and animals in the dark in hopes of eliminating all road deaths from night time pedestrian impacts as well as collisions with animals like deer or dogs. We, however, found the technology to be so good that it was capable of picking up and detecting animals as small as cats and rabbits as well.

BMW introduces Gesture Parking Technology with Apple that allows you to use the Apple Watch on your wrist to be able to park your car from outside the vehicle with just a few simple gestures.
Yes, you read that right. BMW and Apple have come up with the ultimate in driverless car technology meant to blow the minds of your friends and neighbors. Without even having to be inside your car Apple and BMW have made it possible to move and park the vehicle simply by gesturing your arm that is, of course, clad in your new Apple Watch.

During a demonstration the technology worked perfectly so it seems likely to appear as part of the next generation of Apple Watch due in another year or so.

Non-Profit Consumer Watchdog Group trying to put the brakes on the "Robot Car Hype" to ensure the technology is truly ready before it is used in the real world:

There is a lot of hype surrounding the driverless car nowadays, so says the pro-safety non-profit that calls itself the Watchdog Group. As so much of CES was dedicated to all of the new ways humans would no longer need to interact with their automobiles, the Watchdog Group in a press conference reminded all that the point of autonomous automotive technology should be increasing safety and lowering road fatalities. The group successfully has already gotten the state of California to outlaw testing of vehicles without any secondary human controls should a driver need to intervene. And did we mention California looks set to pass legislation that requires there be a human capable of taking over the controls in every "driverless car?" This news was very disappointing to Google which is now in the middle of testing 53 driverless cars in California and Texas. There are currently eleven companies with permits to test driverless cars in California and they include Volkswagen, Tesla, Mercedes-Benz, Bosch, Delphi Automotive, Nissan, BMW, Honda, Ford and of course Google.