

BMW to reveal driverless innovations that allow for 360-degree collision avoidance and valet parking

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BMW Remote Valet Parking.

BMW will be showcasing new technology at next month's CES 2015 featuring a system meant to automatically eliminate all types of collisions and that also allows a car to park itself in multi-story parking garages. The system is based on four-laser technology and is meant to assist a human driver by automatically decreasing throttle or by applying brakes to avoid accidents and by taking over parking responsibilities altogether.

The automatic [parking](#) feature (they call it a Remote Valet Parking Assistant) is meant to be instigated using a smartwatch/smartphone app, allowing the driver and passengers to disembark at a convenient spot (such as near doors, elevators, etc.) and walk away while the car finds a spot and parks itself—it will always back in. The car locks itself once parked and waits for a call from the owner, whereupon it un-parks itself and drives to a specified location in the garage for a pickup—the system is even smart enough to calculate lag time for walking so that the humans won't have to wait

for the car to arrive. Notably, the system works without relying on GPS, which wouldn't of course work inside a parking garage, though it does require a site plan.

The [collision avoidance](#) is based on 360 degree sensor technology that feeds information to a computer which constantly calculates the risk of collision based on current conditions—if the system becomes convinced that a collision is imminent, it slows or stops the car whether the driver agrees with that assessment or not—though it can be overridden and will return control if the driver makes an appropriate steering adjustment. Thus, the system will prevent drivers from making mistakes, and from taking risks, such as cutting in and out of traffic, turning too fast, or backing up without making sure there isn't something in their path.



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The move by BMW, the world's largest luxury car maker, suggests that car makers are going to take

an incremental approach to self-driving cars, allowing them to do so in reasonably safe environments before unleashing them on roads and highways. The question still remains though, of whether it will be legal for car owners to walk away and let their [car](#) park itself, and if an accident occurs, who will get the blame.



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More information: via [BMW](#)

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