

How Jaguar Land Rover Is Getting Ready For The 4th Industrial Revolution: AI & Autonomous Cars

As the United Kingdom's largest automobile manufacturer and investor in research and development in the UK manufacturing sector, [Jaguar Land Rover](#) is the combination of two iconic British car brands—Jaguar that features luxury sports cars and sedans and Land Rover, maker of premium all-wheel-drive vehicles. These brands began in the middle of the 20th century and gained a reputation for innovation. The company plans to continue the tradition of innovation as they pave the way to the future through AI and machine learning investments and applications.



How Jaguar Land Rover Uses AI and Machine Learning

The inaugural [Jaguar Land Rover Tech Fest](#) was held in 2017. Along with discussions on how to live in a more connected world, exhibits and electric vehicles that allow you to maintain the pleasure of driving even in an autonomous future, Jaguar Land Rover unveiled [Sayer](#)—the company's voice-activated intelligent steering wheel. The Sayer steering wheel is named after E-type designer Malcolm Sayer who worked for Jaguar from 1951 to 1970.

Even though the Sayer steering wheel will revolutionise the way you drive, it will also become your new connected mobile device and voice assistant if JLR's vision of the future materialises. Drivers of the future will take their steering wheel with them and could be the only part of the car they own. The Sayer steering wheel will also be the "membership card" to an on-demand service club that will summon an autonomous vehicle—one you own or share with others in the community—to drive you where you need to go. With capabilities similar to a virtual assistant such as Alexa, the steering wheel will be able to make reservations, call up your calendar and read the news to you.

Jaguar Land Rover is already developing technology to create the [world's first self-learning car](#). By leaning on the latest [artificial intelligence](#) techniques, the car "learns" the driver's habits and preferences such as how they like the car seat positioned, what radio stations they tune into at different parts of day and more. Once the car learns these nuances, and they recognise a driver through a key fob or phone, the car

automatically adjusts settings for the driver. Tests also show the possibility for the car to send alerts to the driver before they leave home to remind them to bring items on the road so they are never at risk of forgetting something at home.

Jaguar Land Rover is also trying to tackle the psychological barriers to humans trusting self-driving cars by adding eyes to their [prototype driverless car](#) that are intended to “communicate” with pedestrians. The car eyes will connect with a pedestrian in the same manner a human driver makes eye contact to let the pedestrian know they see them and will stop to allow them to cross an intersection safely.

Another innovation Jaguar Land Rover hopes to perfect is [autonomous off-road driving tech](#) on its vehicles. The company recognises the autonomous vehicles are inevitable, but they want to ensure that the capabilities and performance levels current JLR customers expect are still available in an autonomous future. Through [Project Cortex](#), technology such as video, radar, light detection, distance sensing and more are combined to allow the car to adapt to any environment. Due to [machine learning](#), the vehicles will learn from experiences and be able to get better over time. The goal with Project Cortex is to have autonomous technology capable of levels four and five automation—four being able to operate in specific environments and five being able to operate without any human intervention.

Jaguar Land Rover announced plans in early 2018 to open up a [research and development centre](#) in the UK focused on software for electric and self-driving vehicles. With the addition of this new centre, the company has tremendous potential to pioneer future autonomous and electric technologies. This centre is in addition to the company’s [tech incubator](#) that brings together innovators in the fields of artificial intelligence, electric vehicles and its ecosystems, and emergency response technology. Many of the company’s ideas for the future are part of [the FUTURE-TYPE on-demand vehicle concept](#) car which aims to respond to the transportation demands of the future while still maintaining the Jaguar Land Rover heritage of premium products and high-performance vehicles that individuals love to drive.

Ideas and insights you can steal

Jaguar Land Rover is taking a proactive approach to the inevitable shift to autonomous vehicles. Instead of following or allowing other car manufacturers to develop solutions and technology, they have stepped into a leadership role themselves with significant research and development investment and innovation that carefully considers what the future consumer will demand while building a solution that stays true to the company’s heritage of premium, high-performance vehicles that honour the joy of getting behind the wheel. These actions allow Jaguar Land Rover to position themselves in the future marketplace in a way that works for their brand and keeps them relevant.



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