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AUDI EXPERT: FULLY AUTOMATED CARS WILL BE ON THE ROAD STARTING NEXT DECADE - AND CARMAKERS MAY OFFER DRIVING FLAT RATES



Ricky Hudi: a trailblazer of automated driving (Photo: Audi)

BLOG 2025AD Team



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Ricky Hudi is one of the forerunners of automated driving. In an exclusive interview with 2025AD, Audi's Executive Vice President Electronic Development lays down his vision for a driverless future. He predicts that traditional carmakers will soon embrace entirely

new business models – and reveals his idea for a premium car flat

THE YEAR OF AUTOMATED DRIVING

2009: An Audi TT drives autonomously across the Salt Lake in Utah. 2013: Audi is the first automotive manufacturer to receive a testing license for driverless cars in Nevada. 2015: An autonomous A7 – famously named "Jack" – drives from Palo Alto to CES in Las Vegas.

It's easy for Ricky Hudi to remember the dates and details of all those driverless milestones. Because he played a key role in every single one of them. In the highly competitive race towards autonomous driving, German OEM Audi remains at the forefront – with Hudi as Executive Vice President Electronic Development being a central actor. We sat down with him to talk about his fascination for self-driving cars, Audi's roadmap for fully autonomous driving and Audi's cooperation with the world's leading semiconductor producers.

2025AD: Mr. Hudi, you are regarded as a pioneer of automated driving. How did your fascination for the technology come about?

Ricky Hudi: This goes a long way back. In 1990, I started my professional career at BMW in Munich and I commuted there from my hometown of Ingolstadt –every day, for seven years. So I spent a *lot* of time on the highway. That's when I developed a strong determination to do everything I can to ensure that one day cars can drive themselves!

2025AD: Was it tough to convince colleagues of the driverless vision in the beginning?

Hudi: (laughs) Not everyone was entirely convinced of the idea at first. But if you look at the degree of change that goes along with the idea, this is absolutely understandable. This is why Audi has always aimed to clearly communicate the opportunities and challenges of this revolution.

2025AD: How did Audi convince internal skeptics?

Hudi: Our guideline is: If you don't want to drive yourself, your car will chauffeur you. And if you want to enjoy sporty driving, you drive yourself. This is especially important for a sporty premium brand. All those hours stuck in traffic – you can make better use of your time! With autonomous driving, we want to give our customers a 25th hour of the day – by saving them time that they would waste otherwise.

2025AD: When will a fully automated Audi drive on our roads?

Hudi: We will gradually introduce more driver assistance features into our cars until we reach full automation. This way, we can learn from every step and improve safety.

2025AD: What will your next steps be?

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offers a high level of comfort for the driver. Next year, the new A8 will be the world's first car with true Level 3 automation. On congested motorways, it will be able to drive itself at up to 40 miles per hour (60 kilometers per hour). When the driver needs to take over the steering wheel, there will be a proper handover. The driver always has to be in the loop – similar to a pilot in an airplane. That's why we call it *piloted driving*.



A highly automated version of the A8 will be available in 2017. (Photo: Audi)

2025AD: What about fully automated systems – Level 4 and higher?

Hudi: We are developing those systems in parallel. I predict that we will have them on the road at the start of the next decade. The difference between Level 4 and 5 is not as huge as one might think. Level 4 is pretty challenging because it requires considerable improvements of sensors and processing power. For the customer, Level 4 will mean a great leap in comfort because the car will be able to drive itself in many situations – not only on the highway.

2025AD: You have mentioned how important it is to keep the driver in the loop. How is Audi planning to ensure this?

Hudi: We have installed a camera into the instrument cluster that observes the driver. If he reads the paper or takes a nap, the system will immediately ask him to take over again. We also have hands-on detection in the steering wheel to facilitate the transition

from automated to human driving. When our "Jack" prototype drove to Nevada, the unanimous feedback of the test-driving journalists was: The transition scenario was sometimes of the test-driving journalists was: The transition scenario was some hatthat have been felt uncomfortable.

2025AD: In a recent interview you argued that the customer should be the center of the car while the vehicle itself should be treated more like a smartphone app. What do you mean by that?

Hudi: I wanted to provoke the industry a little bit. Over the last few decades we have perfected the car experience. Driving in all its facets is fun. But the customer today has a digital lifestyle. Yes, we do have smartphone integration, voice command, navigation and much more in our vehicles. But there is still work to do. Car experience and digital lifestyle need to blend into a user experience.

2025AD: Could you give an example of how the user experience could be further improved?

Hudi: If you have an iPhone, iPad and Macbook, you can synchronize your settings over the cloud for the entire device family. Vehicles today can be personalized in manifold ways. But if you buy or rent a car of the same type, wouldn't it be nice if the vehicle could take your personal configuration from the cloud as well? That is something that we are working on.



Ricky Hudi demands a change of mentality in the car industry. (Photo: Audi)

2025AD: Audi established the Progressive SemiConductor Program in 2010, a farreaching cooperation with the semiconductor industry. Why is this technology so Important for automated driving?

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Hudi: 80 percent of the innovations in cars are directly or indirectly connected to semiconductors. Today's premium cars feature roughly 6,000 semiconductors. We are cooperating with the world's leading semiconductor developers. We communicate with them at an early stage of the development process. If a chip is suitable for an application in our vehicles it will get a specific automotive qualification.

2025AD: The semiconductor industry has significantly shorter production cycles than the car industry. How can they cooperate with each other?

Hudi: We have developed systems that are modular. Take Audi's infotainment system: some parts have short and some have longer lifespans. Everything that concerns connectivity, navigation or voice control has a short lifespan, for instance. With our Modular Infotainment Platform, we are able to separate the short-lived from the long-lived parts. This way we can introduce innovations in consumer electronics much faster.

2025AD: How does the user benefit?

Hudi: In 2014, we introduced a virtual cockpit in the Audi TT for the first time. Two years later, we are offering this virtual cockpit for almost every model. Such a pace would not have been possible without our program.

2025AD: If we look ten years ahead: how will automated driving change our mobility?

Hudi: My personal vision is that in 10 to 15 years, car manufacturers will offer premium flat rates. For, let's say, 1,500 Euros a month I will be able to use every vehicle of Audi's product range. I will simply summon the cars with my smartphone. At the Sunday breakfast table, I will check my schedule for the week. Maybe I would like a Q5 to drive to work on weekdays. On Wednesday evening I have a business dinner, so why not take an A6? And on the weekend I want to go on a trip with my family so I order a Q7. The car picks me up at my home just in time, fully autonomously, fully electric and fully charged. At the office, I leave the car before it parks itself. The car is always there when I need it and it leaves when I don't need it.

2025AD: If OEMs become providers of such flat rate models, doesn't this fundamentally alter the self-perception of this traditional industry?

Hudi: Indeed. But in the future it will be a key success driver to build a high-grade product system around our high-grade core product. Again, Apple is a good example: its devices are of high quality and easy to operate. But what would an iPhone be without iTunes or the App Store?

2025AD: Audi is a car manufacturer that promotes the fun of driving. In the long term, do you think sporty driving will become a niche business?		
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THE YEAR OF AUTOMATED DRIVING		

Hudi: In my opinion there will always be situations where people will say: I want to experience this sporty vehicle and drive myself. I want to drive down a beautiful road and enjoy the perfection of a vehicle. It will not be an either-or decision. It will the best of both worlds.

Flatrate models for premium cars? What do you think of Ricky Hudi's vision? Share your thoughts in the comment section!

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