

# IEEE Brainwaves

IEEE Brainwaves Newsletter is published by the IEEE Brainwaves student chapter of D.J. Sanghvi College of Engineering

## IEEE Brainwaves Feature Events :

### Robo Racing Event



Event - Roboracing : The event Robo-racing was held from 23rd to 25th March in association with Trinity. In this event IEEE Brainwaves had a track designed in an area of 16ft × 16ft. The track consisted of different slopes and challenging obstacles to be driven on, for the participants. The entire track was designed and prepared by the IEEE tech-team with assistance from the SE Co-committee members. There were various checkpoints and each of them on completion earned the player a specific set of points. The fastest and the one earning most number of points was declared as the winner. The average of both time and earned points was used to determine the winner of the competition. The event was also promoted as a fun event. Anyone could play the entire track with the bots that were provided by the organisers. It was ensured that for the competition the participant had to register and get their self-designed bots. The prizes for the competition were 1st prize- ₹2.7k

and 2k worth vouchers, 2nd prize- ₹1.5k, 3rd prize-₹800 Overall with positive response from the crowd the event was a great success with a lot of positive feedback.

## IEEE Spectrum Article : 2017's Top Ten Tech Cars

The all-electric Chevy Bolt, with a range of 383 kilometers, tops our list



*Illustration 1: Bolt Upright: A Chevy Bolt takes shape on an assembly line, where economies of scale help make this super-long-range EV super affordable.*

You can show people an Italian supersedan that set a lap record on the famed Nürburgring circuit. You can point them to a sleek, affordable electric runabout that can go from Paris to Luxembourg on a single charge. But they'll probably just want to know one thing: When are cars going to drive themselves? These smart systems can detect changes in a physiological signal and then respond by delivering a therapy or adjusting the patient's treatment in real time.

The specter of the fully autonomous, virtually self-aware car has captured imaginations and dominated headlines like no other automotive story in decades. And for at least one very good reason: Such vehicles promise to dramatically reduce or even eliminate deaths and injuries in automobiles.

Yet as we spotlight the year's 10 most technically innovative cars, there's not a fully autonomous car available in any showroom in the world. My own view is that you won't see one for 5 to 10 years—especially if you're referring to (trumpets, please) Level 4 autonomy, the point at which human drivers can snooze or read a novel while the robotic chauffeur does all the work.

To be sure, advances are coming at a startling speed. Companies as established as Ford and as new as Google's spin-off, called Waymo, are racking up countless autonomous kilometers in test vehicles, many of them on public roads. Seeing that, the hype-driven tech media continues to proclaim that we're oh-so-close to showroom cars that can go it alone entirely.

It's wishful thinking. Even Tesla's vaunted (and misleadingly named) Autopilot doesn't come close to it. One unfortunate Tesla driver learned that lesson the hard way, milliseconds before perishing when his Autopilot failed to detect and brake for a semi truck directly in his path.

And in 2017, every major global automaker is playing it safe and emphatically holding the line at Level 2 autonomy, which demands that a driver be ready to retake control at a moment's notice. They're focused on ever-improved lane keeping, automated braking, and other systems that serve as an electronic copilot—one that never outranks the driver. Humans must remain vigilant and (mostly) keep their hands on the wheel.

Whether that makes you cheer or jeer, you'll find plenty of other technology triumphs that are in automobiles available now. Here we've assembled the best of these, including breakthroughs in performance, materials, electric power trains, and energy efficiency—and a couple of advances in semi-autonomous systems as well. Dig in, enjoy the bounty, and keep your eyes on the road.

Read More at

<https://spectrum.ieee.org/transportation/advanced-cars/2017s-top-ten-tech-cars>