

### **Automotive IQ**

APRIL TOP FIVE

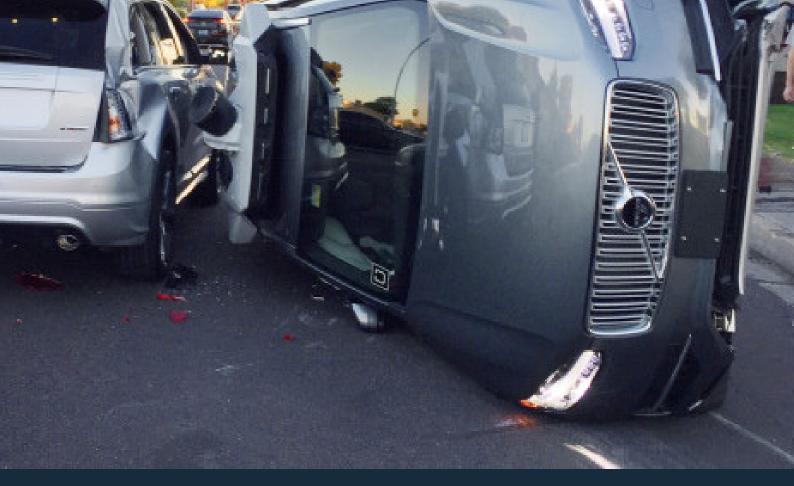
WHICH CONTENT CAUGHT THE ATTENTION OF 50.000 AUTOMOTIVE IQ MEMBERS?

CHECK OUT THE TOP 5
CONTENT PIECES
FOR APRIL 2018!





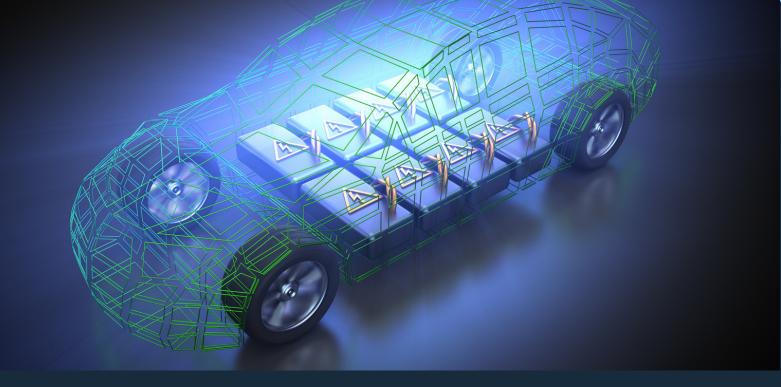




## 5 SETBACKS TO THE FUTURE OF MOBILITY FOLLOWING THE FATAL UBER ACCIDENT

With the fatal Uber incident, the industry faces a few setbacks. Read this article to learn more about the incident, and how it has affected the testing of autonomous drive.





### **NEXT REVOLUTION IN** MAGNETIC ANGULAR **POSITION SENSING**

This 30-minute webinar examines a new magnetic position sensor that helps enable new designs and reduce design effort and cost by adding innovative features such as stray field immunity mode, input pin measurement capability, high-temperature operation, and improved robustness for harsh operating environments.

Topics to be discussed include:

- Applications using magnetic sensors

- Advantages of magnetic sensors
  Magnetic configurations
  Software and hardware tools available for easy evaluation and integration of magnetic sensors

An audience Q&A follows the technical presentation





## ELECTRIC VEHICLE HEATING AND COOLING

The operation of HVAC systems in PEVs or any fully electric vehicle poses many of the same problems that running other systems face, but HVAC use poses some unique challenges, too. In climates where electric cars are or will be a major part of the transportation load from now on, consumers demand efficient and powerful heating and cooling in their vehicles. To help system improvements now underway in fully electric vehicles, engineers had to move away from the vehicle's ability to use the large amount of excess heat produced by internal combustion engines. Regulating the temperature in any battery vehicle is a delicate venture since the power source degrades by calculable amounts under regular use, but by irregular amounts under the most stressful conditions.

Read the article!



# THE FIRST LEVEL-3 AUTOMATED VEHICLE IS ON THE ROAD: IS ISO FUNCTIONAL SAFETY AND ANALYSIS IN STEP?

Because no two automated-driving technologies are exactly alike, SAE International's standard, J3016, defines six levels of automation, intended to classify a system's sophistication for use by automakers, suppliers, and policymakers. In this definition a vital change occurs between Levels 2 and 3, when responsibility for monitoring the driving environment shifts from the driver to the system.





## IS DEEP LEARNING REALLY THE SOLUTION FOR EVERYTHING IN SELF-DRIVING CARS?

The higher the level of automation for a car, the more "intelligent" the vehicle needs to become. Evolved from the study of pattern recognition and computational learning theory in artificial intelligence, machine learning explores the study and construction of algorithms that can learn from and make predictions on data – such algorithms overcome following strictly static program instructions by making data-driven predictions or decisions, through building a model from sample inputs.



#### **INTRODUCING AUTOMOTIVE IQ**

Automotive IQ is an international online platform focusing on providing automotive industry professionals with a central resource for knowledge on topics such as Autonomous Drive, Powertrain, Electrics/Electronics, Chassis Systems and Car Body & Materials.

Membership is free. By becoming a member you have access to a plethora of industry-relevant information through expert interviews, white papers, our blog, presentations and podcasts. You will also find links to our upcoming automotive conferences focusing on current topics and future trends within the auto industry.

Most importantly, the Automotive IQ is a community. We are dedicated to creating a learning environment for sharing best practices and finding solutions to challenges within the automotive industry.

