

SMART DRIVING CARS

<http://smartdrivingcar.com/Crashes-060316>

Friday, June 3, 2016

The
New York
Times

It's No Accident: Advocates Want to Speak of Car

'Crashes' Instead

M Richtel, May 22, " Roadway fatalities are soaring at a rate not seen in 50 years, resulting from crashes, collisions and other incidents caused by drivers.

Just don't call them accidents anymore.

That is the position of a growing number of safety advocates, including grass-roots groups, federal officials and state and local leaders across the country. They are campaigning to change a 100-year-old mentality that they say trivializes the single most common cause of traffic incidents: human error. "When you use the word 'accident,' it's like, 'God made it happen,'" Mark Rosekind, the head of the National Highway Traffic Safety Administration, said at a driver safety conference this month at the Harvard School of Public Health. "In our society," he added, "language can be everything."

Almost all crashes stem from driver behavior like drinking, distracted driving and other risky activity. About 6 percent are caused by vehicle malfunctions, weather and other factors...." [Read more](#) *Hmmm... I should have started the [last issue of SDC](#) with this article. Mark is absolutely correct here. Language matters and it is NOT an accident. it is a Total Poop Show!. Alain*



[Uber Turns to Saudi Arabia for \\$3.5 Billion Cash Infusion](#)

M. Isaac, June 1, "In its quest to build a global empire, Uber has turned to the Middle East for its biggest infusion of cash from a single investor. Uber said on Wednesday that it had raised \$3.5 billion from Saudi Arabia's Public Investment Fund, the kingdom's main investment fund, in one of the largest-ever investments into a privately held start-up.

The money was part of the ride-hailing giant's most recent financing round and continued to value Uber at \$62.5 billion. The investment, which was months in the making, does not cash out any of Uber's existing investors..

Uber said expanding its service may be a boon for Saudi Arabia, a country where women are not allowed to drive because of fatwas, or religious edicts, issued by conservative Muslim clerics that uphold a distinct segregation between the sexes..." [Read more](#) *Hmmm... Maybe not a high price to pay for on-demand mobility for the better half of the population. Alain*



[NuTonomy raises \\$16M to make self-driving taxis a reality by 2018](#)

J. Russell, May 24 "Another week, another story about a promising independent self-driving vehicle company. Last week, Otto came out of stealth to offer autonomous technology for trucks, and today MIT spinoff NuTonomy announced \$16 million in funding to go after its ambitious goal of offering self-driving taxis within two years.

Cambridge, MA-based NuTonomy was founded by MIT PhDs graduates Karl Iagnemma (CEO) and Emilio Frazzoli (CTO) in 2013 and it is pioneering self-driving technology for cars — yes, the very kind of vehicle that Uber, Google, BMW, GM/Lyft, China's Baidu and others are currently developing. Like Otto but unlike the aforementioned big names, NuTonomy retrofits existing cars with the technology to make them driverless.

The company announced a \$3.6 million seed round in January, which included input from Ford chairman Bill Ford's Fontinalis Partners fund, and today it revealed its \$16 million Series A round. The new investment is led by Highland Capital Partners, with participation from the Singapore Economic Development Board (via its EDBI investment arm), Ford's fund and other existing backers including Signal Ventures and Samsung Ventures..." [Read more](#) *Hmmm... Congratulations. More progress! Alain*



[Autonomous-Car Startup Zoox Seeks Up to \\$252 Million in Funding](#)

E. Hunt, May 27, "Zoox Inc., a secretive autonomous-driving startup in Silicon Valley, is seeking to raise as much as \$252 million in funding, according to a securities filing. If the fundraising is successful, the investment could give Zoox a valuation of more than \$1 billion, according to an analysis by venture-capital research firm VC Experts.... [Read more](#) *Hmmm... OK, go for it! Alain*



[New research shows consumers uninformed, wary of new vehicle technology](#)

J. White, June , "...Separately, a survey released Thursday in Britain found that 55 percent of 2,002 respondents said they were unlikely to want to be a passenger in a driverless car. The poll was conducted by the Institution of Mechanical Engineers/ICM Unlimited.

A separate study by University of Michigan researcher Michael Sivak earlier this week found similar wariness of driverless vehicle technology among U.S. residents, with more than half of respondents saying they'd rather drive themselves.

...The average of the respondents' guesses as to a plug-in hybrid's driving range was 260.8 miles, less than half the actual range of most plug-in hybrids on the market..." [Read more](#) *(Similar USA Today, and UofM Press Release) Hmmm...And as the lore reports... If Henry Ford would have conducted a survey he would have found that consumers wanted a faster horse. What if these folks were asked: Do*

you ride driverless elevators? Would you prefer to drive your own elevator? Do you ride in automated people movers in airports? Do you prefer using the steps instead of an escalator? Do you tolerate sharing a ride in an elevator? etc. Alain



[Let's Use Self-Driving Cars to Fix America's Busted Infrastructure](#)

E. Blumenauer, May 20, "...Fleets of autonomous—and likely electric—driverless cars will contribute little in traditional transportation user fees like gas taxes, parking fees, and traffic fines, leaving governments facing ever bigger holes in infrastructure budgets. Without reliable revenue, policymakers from city councils to the halls of Congress will be unable to plan for and deliver transportation projects, construction of new infrastructure, and even basic maintenance...." [Read more](#) *Hmmm... What is quoted is TRUE!; however, the rest of article is very shallow and doesn't begin to address this most challenging issue. Alain*



[GCDC 2016 looks back on a successful event: Enthusiastic crowd at demonstrations of self-driving cars in Helmond](#)

June 1, "...During the weekend of 28 and 29 May 2016 the city of Helmond was the centre of an international event in the field of cooperative driving: the Grand Cooperative Driving Challenge. The GCDC 2016 is one of the highlights of the i-GAME project, a European research project, supported by the European Commission, in which the next step towards the cooperative automation of vehicles are taken..." [Read more](#) *Hmmm... Congratulations. More progress! Alain*



[Tesla customers have driven 100 million miles with Autopilot active](#)

N. Statt, May 24 "Tesla says owners of its electric vehicles have driven 100 million miles using its autonomous Autopilot feature. Sterling Anderson, Tesla's director of Autopilot programs, told a crowd at the EmTech Digital conference today in San Francisco that the data collected from those trips is what the team is using to develop, refine, and introduce more features in the future. The company has

around 70,000 vehicles on the road capable of Autopilot, and those who enable it log 2.6 million miles a day. That far outpaces Google's self-driving car program, which has driven more than 1.5 million miles throughout the history of the project..." [Read more](#) *Hmmm... This is about 35miles/Tesla-day, seems a little high even if all vehicles are used every day with Autopilot on all the time. (I shouldn't be so picky, even if they've exaggerated by a factor of 2, it is still an impressive amount of driving data that has been accumulated over what may well be much more diverse driving environment.) It sure would be nice if Tesla would share the data with the research community. Alain*

PITTSBURGH BUSINESS TIMES [State unveils task force to guide driverless car technology](#)

P. Gough, June 1, "...[Senate Bill 1268](#), sponsored by state Sen. Randy Vulakovich, R-Glenshaw, would amend the state laws to allow for testing of autonomous vehicles, require the testers to get \$5 million in insurance and allow for fully self-driving vehicle testing. A memo with the bill mentions it is also being introduced to help with the Smart City Challenge funding..." [Read more](#) *Hmmm... Congratulations. More progress! Alain*

Detroit Free Press [Michigan bills expand use of driverless cars beyond testing](#)

D. Eggert, May 28, "...Under a newly introduced package of bipartisan bills that would update 2013 laws to allow for the operation of autonomous cars on public roads without anyone at the wheel, tight "platoons" of smart commercial trucks could travel in unison at coordinated speeds. Also, the Detroit Three — General Motors, Fiat Chrysler and Ford — and other auto manufacturers would be authorized to run networks of on-demand self-driving vehicles..." [Read more](#) *Hmmm... Especially read the [current state of the existing version Senate Bill No. 995](#). Many interesting aspects, but why empower only auto manufacturers to operate "networks of on-demand self-driving (driverless) vehicles". It's not clear that they'll even be the ones manufacturing these vehicles. Alain*



[Texas project uses autonomous vehicle technology for bus safety system](#)

June 3, "...Working in partnership with Texas A&M University Transportation Services, the Mobileye/Rosco Shield+ collision-avoidance system was installed on one university bus that traverses the heart of the campus, passing thousands of students daily. The system provides two types of warnings to the bus driver: a yellow light illuminates when a pedestrian or cyclist is detected within range of the bus, alerting the driver to proceed with caution; a red light illuminates and a buzzer sounds when a pedestrian or cyclist is very close to the bus, alerting the driver to stop to avoid a possible collision. The research team is currently assessing the system and developing the overall concept of operations plan for the test bed..." [Read more](#) *Hmmm... This and what WSTIP is doing means progress without any FTA or US DoT involvement. They are still stuck in [the V2V mud](#). Alain*



[Introducing a New Map for Semi-Autonomous Cars](#)

L. Bliss, June, 1, "...Mapbox, the firm that creates map software using mainly open-source data, announced Wednesday its official bid to build that map, with a new product called Mapbox Drive. It's a map with the ability to direct a semi-autonomous vehicle with enough accuracy to make tight lane changes, and offer real-time traffic and road condition updates to the user. It also marks a big entry into a new market for Mapbox, which has long been known for its [fascinating geo-visualizations](#) and [suite of mobile app-making tools](#)..." [Read more](#) *Hmmm... OK, let's see what they produce. Alain*



[Memorable Memorial Day for Self-Driving Vehicles](#)

B. Simpson, May 31 M. Harris, Jan 12, 2016 "...Self-driving car proponents in California and the Netherlands spent the Memorial Day weekend testing the technology, networking with other advocates, and working on the technology. The first-ever [Autonomous Vehicle Track Day](#) self-driving car event was run at Thunderhill Raceway Park in Willows, Calif.

The event attracted about 24 firms, university workshops, and start-ups in the autonomous vehicle space. Innovators including PolySync, Denso, Renovo Motors, Velodyne and Nvidia were set to go..." [Read more](#) *Hmmm... Congratulations. More progress! Alain*



[Autonomous transport solutions open up a world of opportunities](#)

Scania, May 26 "...“We’re working with what we call autonomous transport solutions, and self-driving vehicles are one of the tools at our disposal,” explains Tom Nyström, Senior Engineer at Scania. “It’s a complete system, handling logistics, the assignment of tasks to vehicles, and information sharing between vehicles and infrastructure. Each transport solution is individually tailored to the customer’s needs.”... [Read more \(and the internal links\)](#) *Hmmm... Commercial truck manufacturers are on-board (except they still are in denial that they have a fundamental safety problem and that the biggest near-term opportunity is to significantly address this denial) . Alain*

[Self-driving truck acts like an animal](#)

Chalmers U. of Tech., May 25, "...We are trying to design a system that adapts to whatever happens, without pointing to specific situations -- and this is something that even the simplest animals can usually do better than existing vehicle solutions."

The software, OpenDLV (which stands for driverless vehicle), is being developed as open source code and is freely available on the internet. Through this, Ola Benderius and his project group hope that other researchers around the world can join the project by running and developing the software in their own vehicles. OpenDLV is intended to serve as an academic platform for researchers in many different scientific disciplines, such as vehicle engineering, adaptive systems, computer science and engineering, perception, neurology, and biology, where they can exchange knowledge about how autonomous vehicles should be made to enable their safe, large-scale introduction into society...." [Read more](#) *Hmmm... Interesting. Alain*

[Isuzu, Hino joining forces on autonomous truck driving](#)

May 27, "Isuzu Motors and Hino Motors will team up to develop a system that supports convoys of self-driving trucks, an innovation that is expected to address Japan's chronic shortage of commercial drivers.

The so-called intelligent transport system will incorporate data-sharing communication among all trucks in the caravan. Information from the lead vehicle's accelerator and brakes is among the data that will guide the rear vehicles. The lead truck will be controlled by a human driver and the other rigs will maintain a constant distance between each other. The technology aims for completely driverless trailing vehicles down the road..." [Read more](#) *Hmmm... Japan continues to try to play catch-up with [Scania](#), [Peloton](#), [Volvo Truck](#), [Daimler](#) and others. Alain*

On the More Technical Side

<http://orfe.princeton.edu/~alaink/SmartDrivingCars/Papers/>

Half-baked stuff that probably doesn't deserve your time: **Luxury Daily** [Audi humanizes piloted driving for latest autonomous testing](#)

F. Cardamenis, May 17 "...The piloted Audi A7 concept has been tested alongside other road users and now is capable of adaptive driving, creating a more human driving resemblance..." [Read more](#) *Hmmm...I thought the whole purpose of autonomous driving was to improve human driving, not resemble it. Autonomous driving already does the the safe and efficient part of driving. Does this mean that Audi is adding in the human craziness parts that Audi includes in its TV commercials which includes the disclaimer "conducted on a closed, non-public road" ?* Alain



[New Technique Controls Autonomous Vehicles in Extreme Conditions](#)

R. Robinson, May 23 "A Georgia Institute of Technology research team has devised a novel way to help keep a driverless vehicle under control as it maneuvers at the edge of its handling limits. The approach could help make self-driving cars of the future safer under hazardous road conditions.... assessed the new technology by racing, sliding, and jumping one-fifth-scale, fully autonomous auto-rally cars at the equivalent of 90 mph. The technique uses advanced algorithms and onboard computing, in concert with installed sensing devices, to increase vehicular stability while maintaining performance...." [Read more](#) *Hmmm...This is good work; however, the central challenge of autonomous vehicles is to get everyone to where they are going safely and NOT do it in some sort of race or test of the handling limits of the vehicle. While academically interesting, little else can be said for this.* Alain

“ Quoted [Are Headlights on Cars a Thing of the Past?](#)

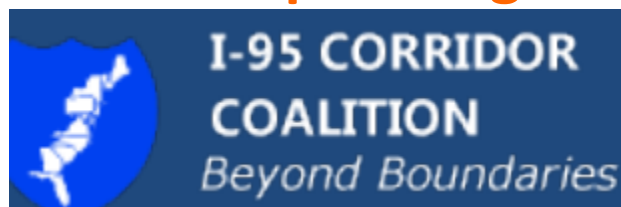
May 23 "... But do driverless vehicles really need to function in complete darkness? [Read more](#) *Hmmm...Actually, dont' bother. The answer is NO!! and this is just a sunday supplement promoting Lidar. On this one, I agree with Elon. Alain*



[Autonomous Vehicles Traveling in Convoys Will Run Into This Inevitable Tradeoff](#)

A. Nordrum, May 24 "Autonomous driving experts practically salivate over the vision of cars forming neat little convoys that travel at a constant speed down a highway. And for good reason: These synchronized fleets could reduce traffic fatalities, free up room on the road for additional vehicles, and help everyone get to their destinations faster..." [Read more](#) *Hmmm...Actually, we don't! So in case you needed another reason why "Marxist-styled centralized management of V2V platooning" is a bad idea (except on the south-bound French Autoroutes on July 31) then read on! Alain*

Calendar of Upcoming Events:



[Connected & Automated Vehicle Conference](#)

What States Need to Know

June 21 & 22, 2016

Maritime Institute (near BWI), Lincoln Heights, MD

<http://i95coalition.org/wp-content/uploads/2014/09/I95CCCAVConferencePacketREV4-15-16.pdf?dd650d>