

Comma.ai punctuating self-driving vision with tests, software update

July 18 2018, by Nancy Owano



Credit: comma.ai

What do you know about comma.ai? Self-driving car watchers know them for sure and are watching with interest in test drives that explore how far they have come along in their own visions of self-driving car capabilities. This is the startup that *Engadget* dubbed "digital chauffeur

for joe sixpack" in its video.

The word is that comma.ai is building the Android for cars. "Since its founding, comma.ai was able to raise millions of dollars' worth of investment, which ultimately helped the company develop and release the open-source version of OpenPilot, as well as hardware like the EON Dashcam and the panda OBD-II Dongle. Today, comma.ai boasts more than 4 million miles driven without driver input."

Those are the words from [Simon](#) Alvarez writing earlier this month in *Teslarati*, the all-things-Tesla site.

George Hotz is the founder and CEO. The company envisions a path to practical self driving cars and the team reports that "Things are coming along." The comma.ai news this month is that there now is an update release of openpilot 0.5. That is the team's open source autonomy software. The codebase was written with rapid prototyping in mind.

Engadget said that the software "offers a number of updates, the most exciting of which is its facial-tracking ability. In the last iteration of the [dev](#) kit, the driver assist would only operate for six minutes at a time—long enough to be useful but not long enough for you to tune out entirely. The new version, however, will track the driver's face to ensure that they keep their eyes on the road. As long as you remain facing forward, the system will work for as long as you need it."

Engadget brought this all home in its account of a real world test drive, with Andrew Tarantola. He described their test drive, a 20-minute trip in light to medium traffic, as ridiculously smooth.

"All I had to do was engage the Honda Civic's [cruise control](#) and set my desired speed using buttons on the steering wheel. Once the driver assist took command, it automatically accelerated, braked and steered as

needed to keep the vehicle in the center of its lane, a safe distance from the cars around it and keep up with the flow of traffic. It even maintained a super-safe 1.8-second gap behind the vehicle in front of it and automatically adjusted its position among the surrounding cars as they changed [lanes](#)."

This is an open source driving agent and there is now a guide to help people port their car. This is what GitHub said: "Currently it [performs](#) the functions of Adaptive Cruise Control (ACC) and Lane Keeping Assist System (LKAS) for Hondas, Acuras, Toyotas, and a Chevy."

Reporter Simon Alvarez wrote about openpilot software on *Teslarati*, an all-things-Tesla site and mentioned self-steering on open highways. Alvarez said it appeared quite capable on its own, "especially on stretches of roads such as freeways."

TechCrunch earlier this year described the car interface, Panda, which plugs into a car's OBD port to [collect](#) and record driving data. At one time, the founder described it to TC as a Fitbit for your car.

The company's technology is installed in supported cars with the company's EON Dashcam DevKit and the Panda OBD-II Dongle; users interface with vehicle diagnostics and messages over WiFi and USB, said *Teslarati*.

Meanwhile, the posting in *Medium* made a special request; to make the system good enough, they seek to push disengagements to zero. "A 'disengagement' is when you need to take over because the [car](#) made a mistake. When you drive with openpilot, you are contributing every time you correct it. And by crowdsourcing annotations for these corrections, we can figure out the mistakes our cars are making and fix them in the next version."

If a user has the EON, a grey panda, and an officially supported car by openpilot, the interface will show disengagements from the trip and the person is asked to select a reason.

All in all, getting on board with comma.ai would involve the required hardware from their shop, such as EON, grey panda, and appropriate giraffe, then on arrival downloading the openpilot software. The user could annotate drives on the comma.ai explorer.

More information: medium.com/@comma_ai/the-half-...-y-point-55662cef04f2

© 2018 Tech Xplore

Citation: Comma.ai punctuating self-driving vision with tests, software update (2018, July 18) retrieved 18 April 2024 from <https://techxplore.com/news/2018-07-commaai-punctuating-self-driving-vision-software.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.