Glory Days

CajunBot proves again it can race with the best

CAJUNBOT MAY SPEND THE rest of its days as a demonstration vehicle.

But fans of UL Lafayette's autonomous six-wheeler will remember that it competed – twice – with robotic vehicles from some of the nation's most prestigious universities.

CajunBot was one of 23 finalists in the Defense Department's second Grand Challenge race in the Nevada desert in October. The Defense Advanced Research Projects Agency held the competition to spur development of a driverless vehicle that could navigate a battlefield. The prize: $2 million.

Stanley, a converted Volkswagen sport utility created at Stanford University, was the winner. It made it through a 131-mile course in six hours, 53 minutes and 58 seconds. The second-place finisher was Sandstorm, a Humvee from Carnegie Mellon University. Carnegie Mellon also claimed the third-place spot with another modified Humvee.

CajunBot was running well until a motor on one of its actuators burned.

In a blog, Dr. Arun Lakhotia, leader of TeamCajunbot, reported what happened:

"CajunBot was put in pause mode for about fifty minutes to allow other oncoming bots on the track to clear.

"In the pause mode, CajunBot pulls its brakes fully, which means the motors are engaged to their maximum capacity. Normally at this state, the motor should lock and not use power. But for some reason, the motor continued to drain power. . . a sustained draw of that level of power for fifty minutes fried the motor."

Only five of the 23 contestants finished the race. Other universities that had entries included Princeton, CalTech and Virginia Tech.

CHRIS LEDET

Technology developed for CajunBot, an autonomous land vehicle, may be used in new ways.

All of the vehicles used GPS, cameras, radar and other sensors to maneuver around obstacles encountered along a predefined route.

CajunBot was one of only 15 autonomous vehicles that competed for $1 million in the first DARPA Grand Challenge last year. No one won, so the prize was doubled for this year's contest.

What's next for CajunBot?

"The next step is to transition the technology to commercial use. We have identified specific new inventions and plan to pursue patenting them. We are also talking to some Defense contractors to commercialize the technology," Lakhotia said.

"In terms of the vehicle itself, CajunBot is likely to become a demonstration vehicle. Our attention will now shift to RaginBot. The two vehicles are equipped with some very sophisticated sensors that have other research applications, so we will investigate those areas."

In a news report, the British Broadcasting Company noted that autonomous vehicles could be used for more than military combat.

"Scott Wilson, of the Cajunbot team from the University of Louisiana at Lafayette, spent days in a boat helping to rescue people from flooded areas of New Orleans.

"He saw at first hand how fears over safety slowed and in some cases halted rescue work. With driver-less vehicles, rescue might have come sooner."