



Oakland Press photos/DOUG BAUMAN

The University of Tulsa had the smallest entry in the event

Robotic vehicles strut stuff at OU

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The weird vehicles on the track at Oakland University on Friday didn't compete in speed or looks but in how well the high-tech robots drove the course with no human control.

Mounted with cameras, computer keyboards, wires, circuit boards and other paraphernalia, the golf-cart size vehicles came from seven universities from as far away as Colorado.

By midafternoon, none of them had gone any farther on the rocky track than University of Michigan's "Maverick," which traveled about 113 yards, 4 feet.

That may not sound impressive, officials said. But it becomes more so, when one understands that students designed the autonomous vehicles to "see" the rough course with a camera, to make a plan with its computer to travel it, and then actually drive the course.

The track was marked in 4-inch white chalk in the mitten shape of Michigan. Vehicles started off at a spot marked

"Detroit" and ran over bumps and hills, holes and curves. U-M's made it as far as the first curve.

OU hosted the 1993 International Unmanned Ground Robotics Competition this week with the U.S. Army Tank-Automotive Command at Warren and the local Association for Unmanned Vehicle Systems.

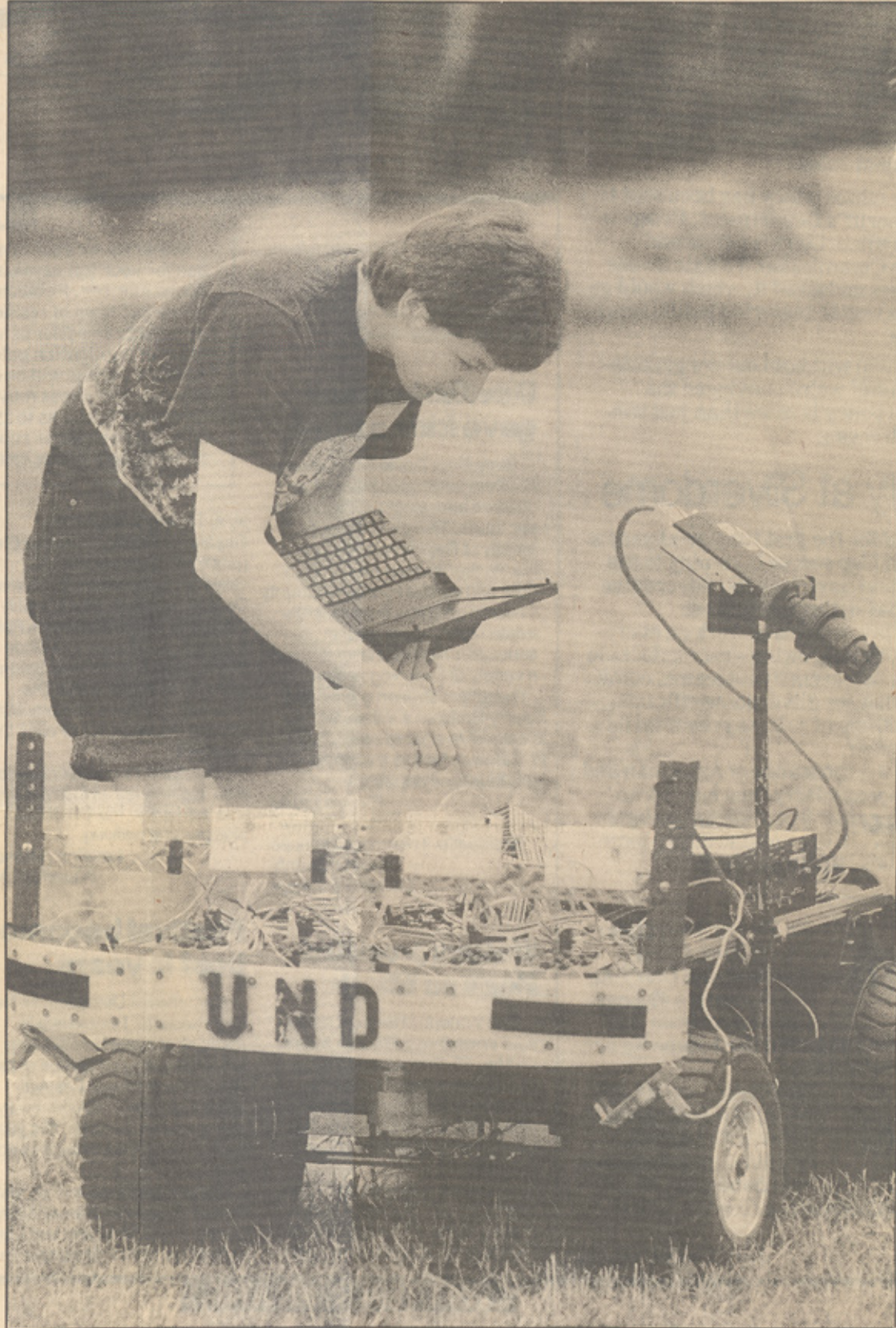
It was the first such competition of its kind, said Paul Lescoe, chief of the Robotics Division at the Tank Automotive Research, Development and Engineering Center.

TARDEC wants to encourage research and development at universities, where most of the breakthroughs are made.

"This is easy for humans to do, but a very difficult challenge for machine systems to do," said Lescoe. "I think they are putting on an exceptional show. The ground environment is the most difficult and unpredictable to move through," he said, as compared to air and water.

"Only within the last two or three years have we been getting significant breakthroughs," said Lescoe.

Visitors came from as far



With computer in hand, Brad Thorvilson of the University of North Dakota works on a vehicle

away as Helsinki University of Technology in Finland.

Other competing vehicles were made by students from University of North Dakota, University of Cincinnati, Cleveland State University, University of Tulsa and University of Colorado-Denver-Omnitech Robotics.

Students were provided with rooms at OU dorms. But the

majority spent most of their time working on their vehicles under the brightly colored tents near the course where the competition was staged.

The OU student team, headed by captains Jim Overholt and Mike Briggs, spent 48 hours without sleep trying to repair their vehicle "Ugly" after it had a major burnout the day before competition.

Under the rules, the unmanned ground robotic vehicles were to navigate around the obstacle course at no more than 5 mph.

Each was equipped with both a manual and a wireless remote control emergency stopping capability so they wouldn't drive off course and into people who sat around the course watching.