

Designers say droids and drones are nothing to fear

Tough to convince skeptics that they won't eventually be replaced by robots

STEVE ARNOLD
The Hamilton Spectator

You can be replaced by a robot.

That message was repeated several times Tuesday as teams of university and high school students put their mechanical creations through their paces in a robotics competition as part of the two-day Innovation Nation conference at Liuna Station.

In interviews, however, the budding scientists and engineers said there's really nothing to fear in the new age when androids will replace humans in some dangerous occupations.

"People think the droids are coming to take their jobs, but it's not like that," said Vinay Yuvashankar, a member of the team behind the creation from Golden Horseshoe Green Tech, based in Hamilton. "It's really a new era of job that's coming. The droids are coming to help you with your jobs."

That might be a challenge for warehouse workers to believe when they see the entry from the robotics team from Stoney Creek's Cardinal Newman high school. Nicknamed Dusty, the tireless worker is designed for warehouses where it can move packages quickly and efficiently, lowering shipping times and cutting labour costs.

At roughly \$1,500, Dusty is a real bargain for the small industries around Hamilton desperately trying to shave costs to remain competitive.

"Dusty will work 24/7, it doesn't take breaks and it doesn't need vacations," said team member Matthew Pateman.

For some jobs, the teens argued, replacing humans with robots makes sense. Robots can plant seeds, harvest crops, dig holes, work in mines without special equipment.

Golden Horseshoe Green Tech's little robot, Ice Cube, was designed with farm applications in mind, along with other uses. The droid was a last-minute replacement for Tuesday's competition, cobbled together in a week from \$200 worth of spare parts.

Their original entry was a drone designed



CHRIS CONRAD, THE HAMILTON SPECTATOR

Matthew Pateman explains the capabilities of Dusty, a robot built by the team from Cardinal Newman Catholic Secondary School.

to produce a light painting based on the user's input to a connected drawing application. Trouble was, the drone crashed and was damaged beyond repair a few days ago.

The conference was sponsored by the Hamilton-based Centre for Surgical Intervention and Innovation. Its CEO, Dr. Mehran Anvari, said the competition was designed to give students a chance to see the practical aspects of science and technology.

"We wanted to show young people how their ingenuity can impact the society around them," he said. "We wanted to show

that robots aren't just toys."

He also argued there's nothing to be feared from finding new ways to put robots to work.

"These robots enhance people, they don't replace people," he said. "They make life safer and there is always a human in charge."

Anvari said robots are finding many uses in health care, from dispensing drugs to doing surgeries, performing daily rounds in hospitals and taking some of the strain off nurses.

"Robots are going to improve our environ-

ment," he said. "They will change our environment a little, but they are natural tool in health care."

The overall winner of Tuesday's competition was Origin, a Mars exploration robot from a University of Toronto team.

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Dusty does a few turns on video at the innovation conference at thespec.com