



The winning drone used external cameras for real-time location information, allowing AI to plot the quickest route. | Photo source [Robotics and Perception Group, UZH](#)

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AI DRONE RAISES BAR IN TERMS OF SPEED

 COMPUTING & TECH

A world-leading quadcopter developed by the University of Zurich was able to defeat professional drone racers in test races

Spotted: A team from the University of Zurich's Department of Informatics has built the world-leading quadcopter. The autonomous drone proved the strength of its algorithm by beating professional drone racers in a series of races in the Drone Racing League.

The winning drone used external cameras for real-time location information, allowing AI to plot the quickest route. Both the autonomous drone and the human racers piloted the course multiple times. Not only was the AI-powered craft faster, but it was also more consistent. In preparation for the race, the human pilots practised running the course several times. The drone needed only one hour of computation to calculate its optimum route which it could execute reliably on repetition.

Researchers are already working to build onboard cameras to replace the external ones used in the exhibition race. Reducing the computing time required by the algorithm to determine the most efficient route is another developmental priority.

Two new developments in drone technology have also been spotted by Springwise, including [water pollution testing drones](#) and [coral reef health monitoring drones](#).

Written by: Keely Khoury

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Email: sdavide@ifi.uzh.ch

Takeaway:

From delivery logistics to passenger travel and natural disaster recovery processes, drones have incredible potential. Not only are they versatile in their many uses, but they help keep humans safe and, if used in large enough numbers, could contribute to reductions in carbon emissions. Regulatory oversight of drone use is in rapid development, as is operator licensing. However, privacy is a considerable challenge, as is general safety when considering the ramifications of operating drones near airfields and government properties. Innovators seeking social change could explore ways to incorporate aspects of drone technology into new processes and products.