

Victoria University engineering students crowned 2013 autonomous robot champions

A team of engineering students from Victoria University of Wellington (VUW) beat 15 other student teams from around Australia and New Zealand to win this year's annual National Instruments Autonomous Robotics Competition Grand Final at Swinburne University on 24 September 2013.

'We're very pleased,' team leader and VUW student Robby Lopex said. 'There are other teams with what we thought had better designs, but I think we got lucky in the end.'

After the runner-up robot, from the University of New South Wales (UNSW), crashed through the obstacle course barriers early on, VUW's robot was crowned champion – the first winner from across the ditch since the competition started in 2011 – despite a complete overhaul only three weeks before the final.

To increase their chances of winning, Mr Lopex said the team 'tried to keep [the robot] as small as possible and used laser-cut parts where we could'.



The winning team: from the left, Tessa Phillips, Alex Campbell, Robby Lopex (holding the robot), Alice Lawn, Joseph Shadwick (behind Alice), and Hamish Colenso.

Judges Professor Zhihong Man, of Swinburne University, and John McIntosh, Victorian president of Engineers Australia, were both very impressed with this year's entries.

'It's great that this promotes robotics in Australia because in 20 years' time, robotics will be useful – and very important – to our society,' Professor Zhihong said.

'It benefits local industry as well as higher education. Our universities have very good courses in robotics.'

'It's a fantastic way to watch people learn and grow,' Mr McIntosh added. 'I asked one of the competitors how he found the learning journey and the answer I got back was, "very steep".'

The knockout final round, this year themed 'Gold Rush' and modelled on a mining task, required robots to identify and handle objects while navigating an obstacle-ridden field in the shortest possible time – and all without external control.

Now in its third year, the competition attracted 22 teams, 16 of which made it through to the final day of competition.

The VUW team shared AUD\$3,000, UNSW received AUD\$1,500, and the team from University of Technology Sydney was awarded Best Robot Design, and shared AUD\$500.

In addition, all teams that successfully completed the competition kept their robot development kit and software valued at more than AUD\$20,000.

Source: The Conversation and Faculty of Engineering, VUW