

# The Ladybird takes its first steps

Meet our newest robot, the Ladybird! A robot we have designed and built for the vegetable industry. In this video, you can see the internal framework and components as it takes its first steps. Stay tuned for more videos as we develop the platform!

We have designed and built this robot as a new research platform to support Australia's vegetable industry. The omnidirectional wheel base allows traversal over most existing farm configurations, treading much more lightly over where existing tractor wheels currently run. In addition to the low weight of the vehicle, the ability to turn each wheel allows precision guidance and manoeuvrability, while minimising damage to the soil. In the undercarriage, the Ladybird carries a variety of optical sensors, including stereo and hyperspectral cameras, and the versatile robot arm enables development in a wide variety of applications, including spraying, weeding, thinning and of course to support harvesting research. We are looking forward to our first tests on vegetable farm in the coming weeks.