

Mobile On-Farm Digital Technology for Smallholder Farmers

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www.sydney.edu.au/acfr/agriculture



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Background



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Farm Robotics



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**Horticulture
Innovation**
Australia

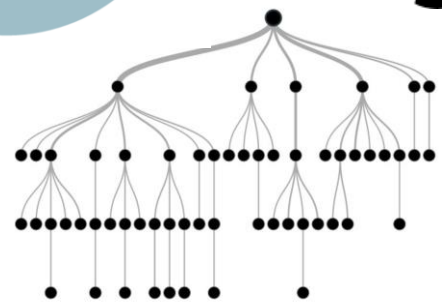
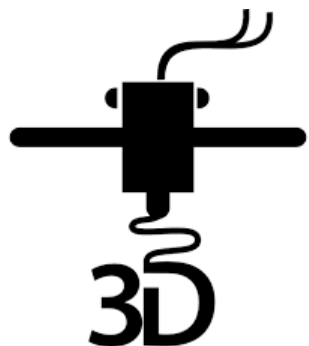
Autonomous Row Following
Lettuce, Lindenow, VIC, Australia







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From 20% to 100%



STEM



Science • Technology • Engineering • Math



First Iteration and Testing

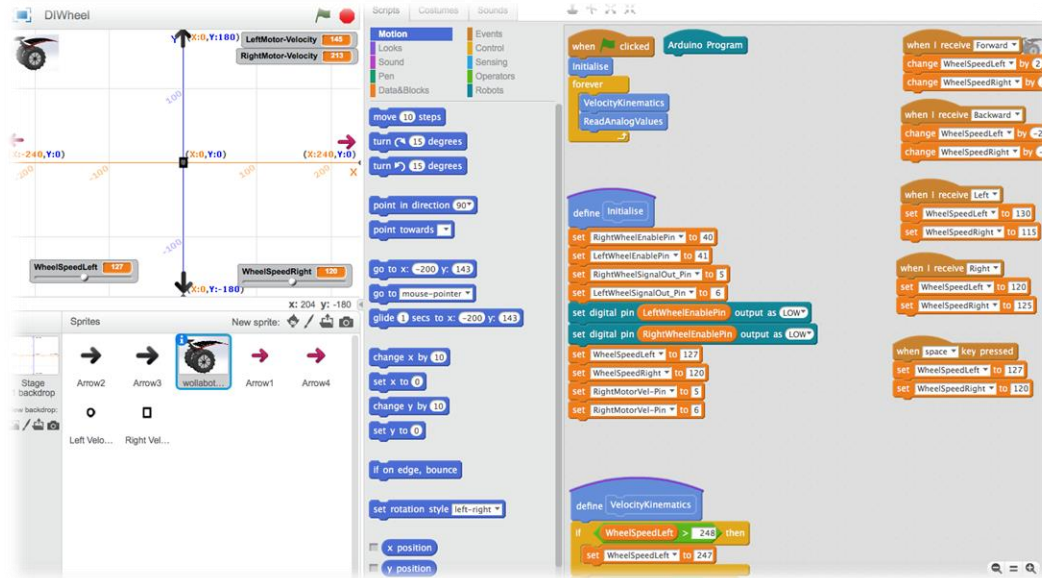


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Digital Farmhand – First Iteration



First Experiment: coding for rural schools



First Experiment: Developing Needs



Second Iteration and Testing



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Digital Farmhand – Local Smallholder Farmer Demo

Digital Farmhand

- Developed for small scale farming
- Crop intelligence using low cost sensing
- Autonomous row turning using ground markers
- Designed to accommodate standard farming implements

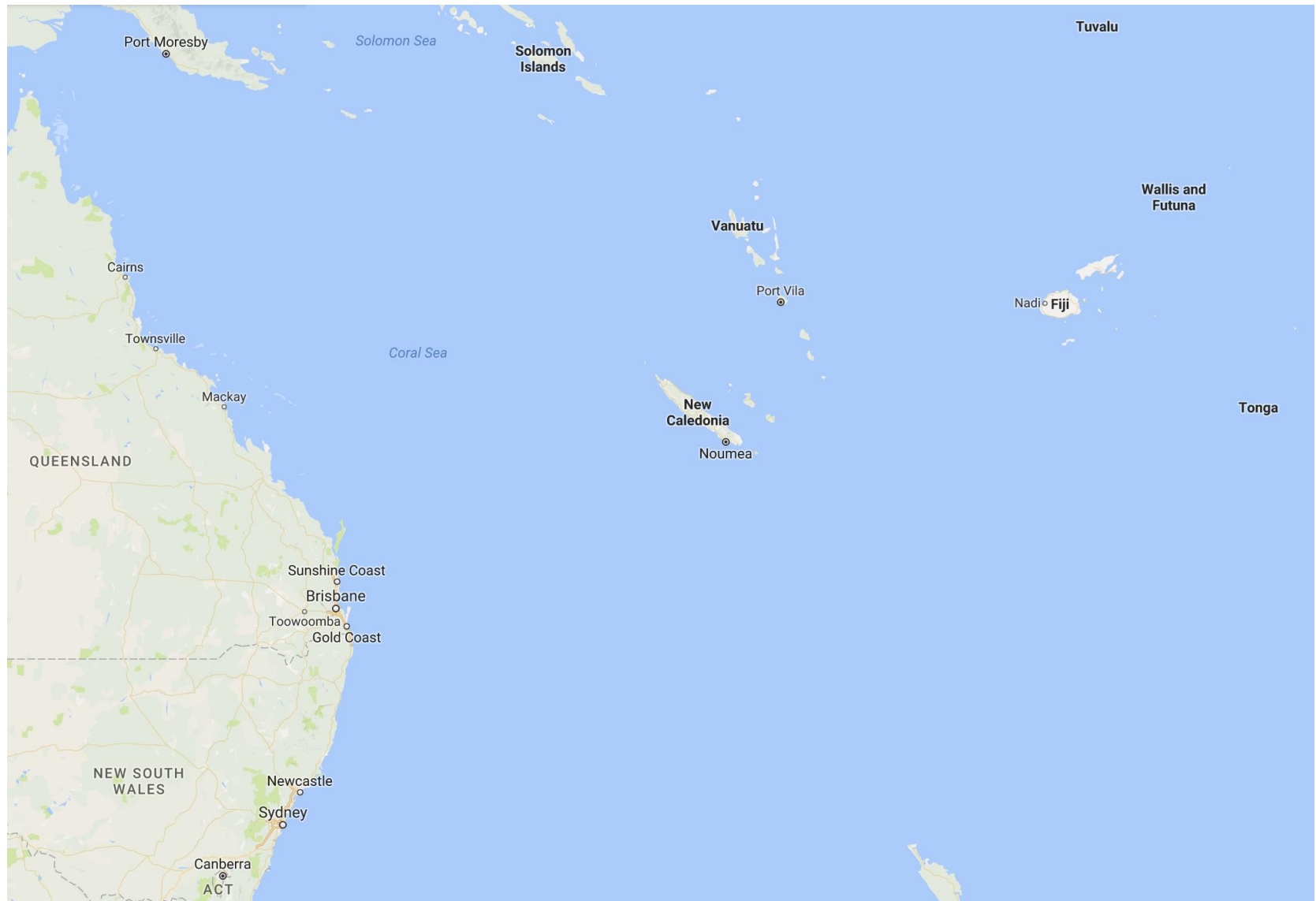


Next Steps



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Scoping Study & Metric Capture: Pacific Islands

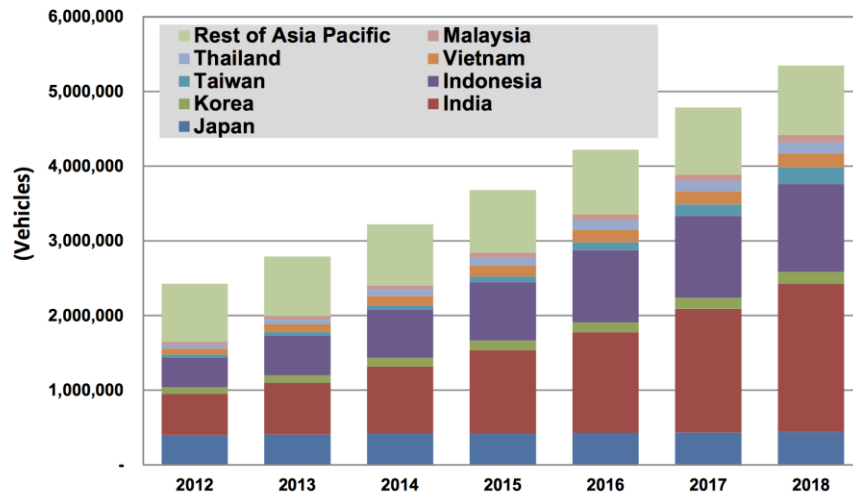


Developing a Common Education and Training Program



Digital Farmhand: Third Iteration

Chart 1.2 Electric Two-Wheel Vehicle Sales by Country, Except for China, Asia Pacific: 2012-2018



(Source: Pike Research)

obi worldphone Perfect Balance



OpenAI

Discovering and enacting the path to safe artificial general intelligence.

RESEARCH SYSTEMS



PaddlePaddle

The Microsoft Cognitive Toolkit



Platform for Big Data in Agriculture



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