Remote Sensing Cluster Group meeting

Date: 17th November 2020, 1.30 – 5pm.

Venue: Rimu Room, Scion, Rotorua, New Zealand.
Zoom connection also to be set up

This meeting blends the latest remote sensing research with new initiatives that will empower forestry companies to more fully utilise UAV data and capitalise on recent breakthroughs in deep learning.

After a short introduction from Michael Watt, the meeting starts with a talk from Grant Pearse around an idea for a sector-wide strategy to bring the benefits of artificial intelligence (AI) to small and large growers alike. This leads onto two talks from Indufor Asia Pacific where a scalable method for characterising post plant tree survival is demonstrated and a web-based dashboard for accessing spatial layers is described. Grant Pearse will then discuss methods and results from Scion's research integrating the fields of remote sensing and forest pathology to maintain healthy and resilient forests.

The second part of the meeting will present a series of talks that launch a new working group focussed on tech transfer of UAV related research to industry. Robin Hartley will start this session through giving an overview of Scion research around UAVs. This will lead onto a summary of the current state of UAV research within industry presented by Mitch Cooke and Matt Cotterell. The final talk from Robin Hartley and Alfred Duval will introduce the idea of the Tools For Foresters Working Group - a small cluster of foresters and researchers who will beta-test the research tools and methods, accelerating the research and tech transfer process. A general discussion of the next steps for this group will be held before the meeting is summarised and closed by Aaron Gunn.

Provisional agenda

Time	Topic	Speaker
1.30 – 1.35 pm	Introduction	Michael Watt
1.35 – 2.00 pm	Democratising access to artificial intelligence (AI) for the New Zealand forestry sector	Grant Pearse
2.00 – 2.20 pm	A scalable method for detecting post plant tree survival using deep learning	Pete Watt, Andrew Holdaway, Chaplin Chan
2.20 – 2.40 pm	Making science-based spatial layers accessible via web-based dashboards	Pete Watt, Andrew Holdaway, Chaplin Chan
2.40 – 3.10 pm	Integrating remote sensing into forest disease modelling	Grant Pearse
3.10 – 3.30pm	Afternoon Tea	
3.30 – 3.55 pm	Overview of UAV research and the vision to 2030	Robin Hartley
3.55 – 4.20	UAV use in the forest industry today	Mitch Cooke, Matt Cotterell
4.20 – 4.45	Launching the Tools For Foresters Working Group and Tools for Forester Initiative	Robin Hartley, Alfred Duval
4.45 – 4.50	Summary	Aaron Gunn
4.50 – 5.00	Questions	

Further information on the meeting can be obtained by emailing: michael.watt@scionresearch.com