Draft Program

Day 1: Tuesday 3 December 2019 – 8am – 5pm

Registration
Acknowledgement of Country and Opening

Digital Agriculture: What is it or what it is? – A. McBratney (The University of Sydney, Australia)
What role for research in catalysing digital agriculture - examples and lessons learnt – M. Robertson (Agriculture & Food, CSIRO, Australia)
How to capture value from Ag big data - A. Koch (AgTech, Australia)
Automation to Autonomy -Real-Time and In-Field response – B. Boydell (John Deere)
Discussion
Morning Tea

Practical uses of digital agriculture - successes to date, and what we need for the future – J. Koch (Past President, SPAA)
Digital soil constraint management: How many samples should I take? - S. Robertson
Digital mapping of CEC in the Proserpine area using gamma ray data and machine learner in Matlab environment - X. Zhao
Portable NIR spectrometer for assessing cotton macro and micro nutrient status - J. Aditya Prananto
Digital soil mapping of soil exchangeable sodium percentage (ESP) based on wavelet transform - N. Li
Predicting within paddock soil moisture using observations from multiple spatial supports. - J. P. Moloney

Discussion
PhD Student - Survey Proposal

Lunch

AgTech innovation and the two valleys of death. - D. Lamb (Food Agility, Australia)
Establishing a spectral library to predict soil physical and chemical properties in cotton growing soils – D. Zhao
Monitoring Soil Water Use at the Plot Level Using Electromagnetic Induction Surveys - M. O. F. Murad
FarmDecisionTECH -- lessons learned from a field trial of agricultural Internet of Things - A. Benter
A high spatiotemporal resolution real-time temperature mapping system to support digital agriculture - M. A. Webb
The role that low-cost nanosatellites can play in monitoring farm water levels - T. Rayner
Economics of autonomous cropping systems: the case for UK arable farming systems - K. Behrendt

Discussion

Afternoon Tea

Digital approaches to winegrowing - R. Bramley (CSIRO)
Artificial intelligence for diagnosing plant diseases: a case study on android application ‘Plantix’ - A. Whitbread
Using data-driven forecasts of sugarcane yield to optimise variable N fertiliser application - S. Y. Han
Mapping and Monitoring of Paddy Fields Extent and Growth Stages in Indonesia - B. Minasny
Integrated Optimization of Cultivation, Fertilizer Application and Harvesting - L. Shao
Using multi-layered, multi-farm datasets to forecast yield, identify yield gaps, and understand causes of variability in cotton - P. Filippi
Digitisation of paddy field in West Sumatra, Indonesia: Opportunities for Digital Agriculture Application – D. Fiantis
Impacts of spatial resolution on the predictive quality of yield forecast models - D. Al-Shammari

Discussion

Close
Registration
What are the prospects of success in a digitally enabled agricultural supply chain? Working collaboratively with industry - E. Murdoch (KPMG)
Flour Mill Optimisation Utilising New Sensor Technology - J. Kalitsis
Use of sensory Technology in the Food Industry - M. Coetzee
Can near-infrared spectroscopy scanning predict meat quality? - C. Coombs
Predicting grapevine quality from climate indicators: which model and indicator combination works best? - A. Cogato
Grain quality for crop management and marketing – B. Whelan
Defining technology addressable trust issues in supply chains - R. Heath (Australian Farm Institute)
Discussion

Morning Tea
Selective non-chemical weed control in large scale cropping systems requires the development of machine learning based weed recognition - M. Walsh
A Site Specific Weed Management System Utilising Unmanned Aerial Vehicle - L. Faria Deleo
Sensing solutions for assessing cover crop-based weed management in a national US on-farm network – S. Mirsky
Paddock-Field Scale Efficacy of a Targeted Tillage Implement for Fallow Weed Control - C. Squires
Comparing energy requirements for site-specific weed control. Is laser weeding feasible? - G. Coleman
Utilization of Unmanned Aerial Systems for Weed Detection and Management - M. Bagavathiannan
Discussion

Lunch
MLA 4.0 digital program Australia wide rollout - Speaker TBC (MLA)
Remote monitoring of cattle behaviour for objective measures of welfare in the beef industry - S. Lomax
Performance and accuracy of two commercially available birth alert systems in semi-feral beef cattle - C. Pearson
How now lame cow: Automatic lameness detection of dairy cattle with 3D sensors - J. Gardenier (The University of Sydney, Australia)
Optimisation of automated calf feeders for improved data utilisation on farm - S. Legge
A data-based decision-support tool for improving productivity and profitability of pasture-based AMS - J. I. Gargiulo
Making better grazing decisions – data and drought - P. Richardson (Maia Technology)
Discussion

Afternoon Tea
Food provenance, traceability and trust - P. Carter (GS1 Australia)

Identifying soil provenance - Y. Ma

Buying fresh food in-store or online? – How product information affects purchase decisions among US beef consumers - L. M. Morales

A Case Study for Systematic Determination of Social Media Behaviours in Premium Beef Consumers - W. Chinthammit (The University of Tasmania, Australia)

Incorporation of agri-tech tools and systems to facilitate the learning of high school teachers in food and fibre production - J. Manning

The ASDO Index – Agricultural Sensor Data Openness – for evaluating on-farm sensors - D. Gallacher

Risk aversion and farm choices: Insights from prospect theory - E. Anderson (The University of Sydney, Australia)

Accounting for Natural Capital on Farms aided by Digital Technologies - T. Ancev

Profit mapping as decision support tool for precision agriculture - G. van Zijl

Financial analysis of precision variable-rate nitrogen (VRN) in Northeast Victoria - T. Nordblom

An Economic Assessment of Pasture-based Automatic Milking Systems - J. I. Gargiulo

Precision Livestock Farming technologies – at what cost? An ex ante analysis of technologies and digitalisation in grazing systems - K. Behrendt

On soil sampling as a capital investment - J. Bennett

A value-chain framework to enhance opportunities for digital agtech in agribusiness – S. Cook (Curtin University, Australia)

Attitudes, attributes, and skills driving technology adoption in the Australian cotton industry - N. McDonald

Assessing the usability of Rice Doctor Odisha: An innovative crop diagnostic tool for extension advisors and farmers - N. W. Zaidi

The Soil Tech Project – Translating Soil Science into Digital Soil Management Apps for Land Managers - A. Koch

Innovation systems approach to digital development of agriculture: lessons from ICRISAT’s India based digital agriculture innovation platform, the ihub - A. Whitbread

A commercial perspective on the barriers to adoption of digital agriculture - E. Leonard
steeDA Conference Day 3: Thursday 5 December 2019 – 9am – 4pm (continued)

DigiFarm. A case study for digital agriculture - G. Roth
Discussion
Lunch

Be Digital. Be Sustainable - C. Diaz Jimenez (Australian Wool Innovation Ltd)
What’s FAIR about Digital Agriculture? - N. Robinson
Ethical Challenges in the Development and Delivery of the Agtech Ecosystem - T. Guerin
Discussion
Panel
Close
Afternoon Tea

Conference dinner: 6.30pm-10pm

REGISTER HERE

Full registration - $490 (does not include conference dinner) Single day registration - $200 (does not include conference dinner)

Full student - $340 (does not include conference dinner) Single day student - $140 (does not include conference dinner)

Conference Dinner (Thursday 5 December) - $120

Further information can be found on the  steeDA Conference website

REGISTER HERE