

UQ Winter Research Project Description

Please use this template to create a description of each research project, eligibility requirements, and expected deliverables. Project details can then be uploaded to the faculty, school, institute, or centre webpage prior to the launch of the program.

Project title:	Crop Traits Prediction using Noisy Data and Simulated Data
Project duration, hours of engagement & delivery mode	4 weeks – 20-36hrs per week. Applicant will be required on-site for the project.
Description:	Statistical and machine learning models for predicting of crop traits such as leaf dry matter offer an efficient and economic approach for selecting crops with desirable characteristics. However, a major challenge in obtaining accurate prediction models is the difficulty of obtaining a large and high-quality training set. This project aims to alleviate this difficulty by exploring methods for training accurate prediction models using noisy data and simulated data.
Expected outcomes and deliverables:	<ul style="list-style-type: none">• Develop an understanding of crop traits prediction methods.• Develop skills for implementing various statistical and machine learning models.• Develop skills in research design, implementation, experimentation, and communication.• A report documenting the work done and the findings.
Suitable for:	Essential: knowledge on machine learning / statistics
Primary Supervisor:	Nan Ye, Qiaomin Chen, Scott Chapman
Further info:	Email nan.ye@uq.edu.au for any inquiry on the project.