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Oil Palm Fruit Ripeness Detector

PI2018700326

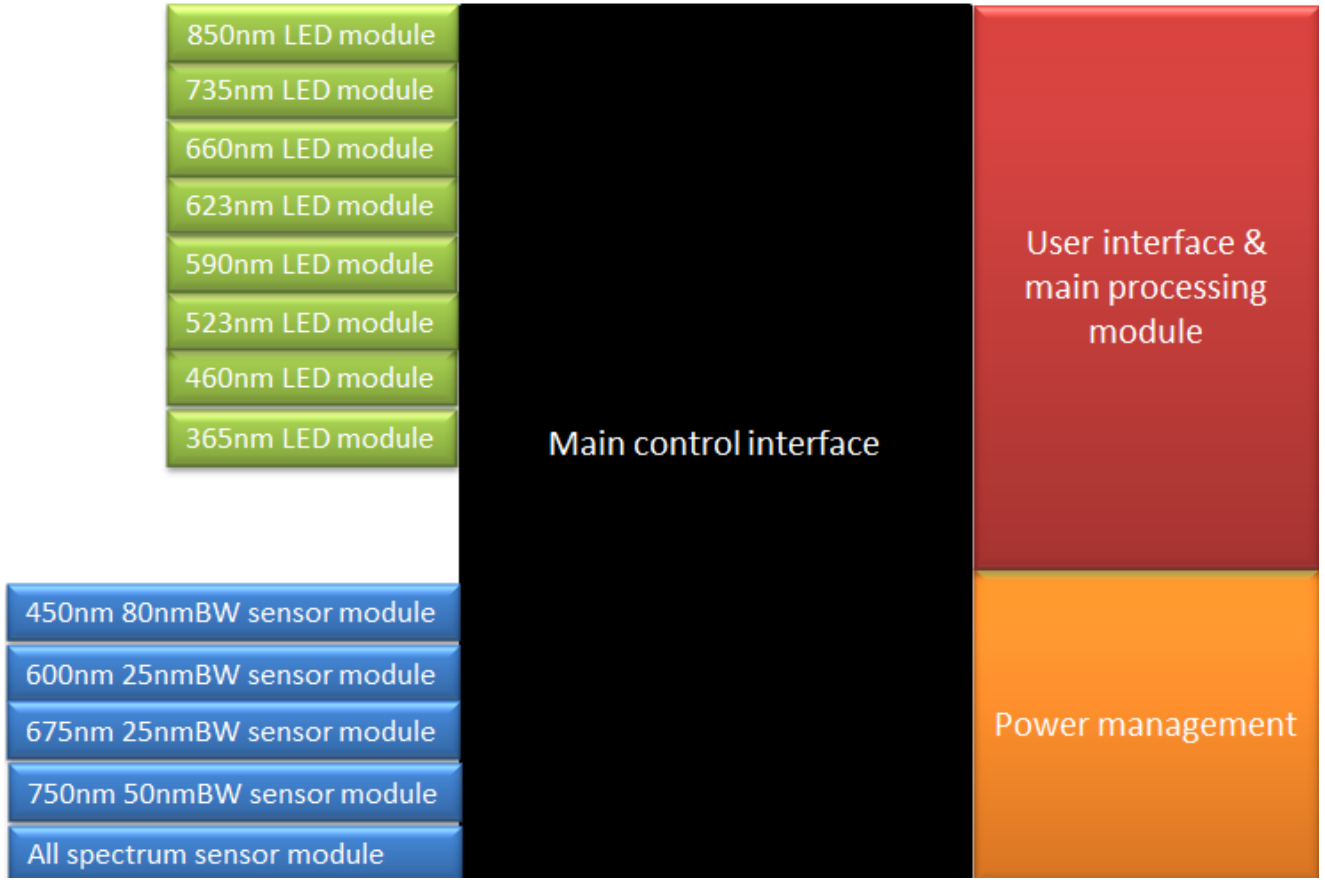
Profesor Dr. Abdul Rashid b. Mohamed Shariff
Jabatan Kejuruteraan Biologi dan Pertanian
Fakulti Kejuruteraan
Universitt Putra Malaysia
rashidpls@upm.edu.my
http://www.eng.upm.edu.my/~rashid

Problem Statement

- Fruit ripeness of bunches are determined by graders. However, such processes may be laborious and subjected to human error.

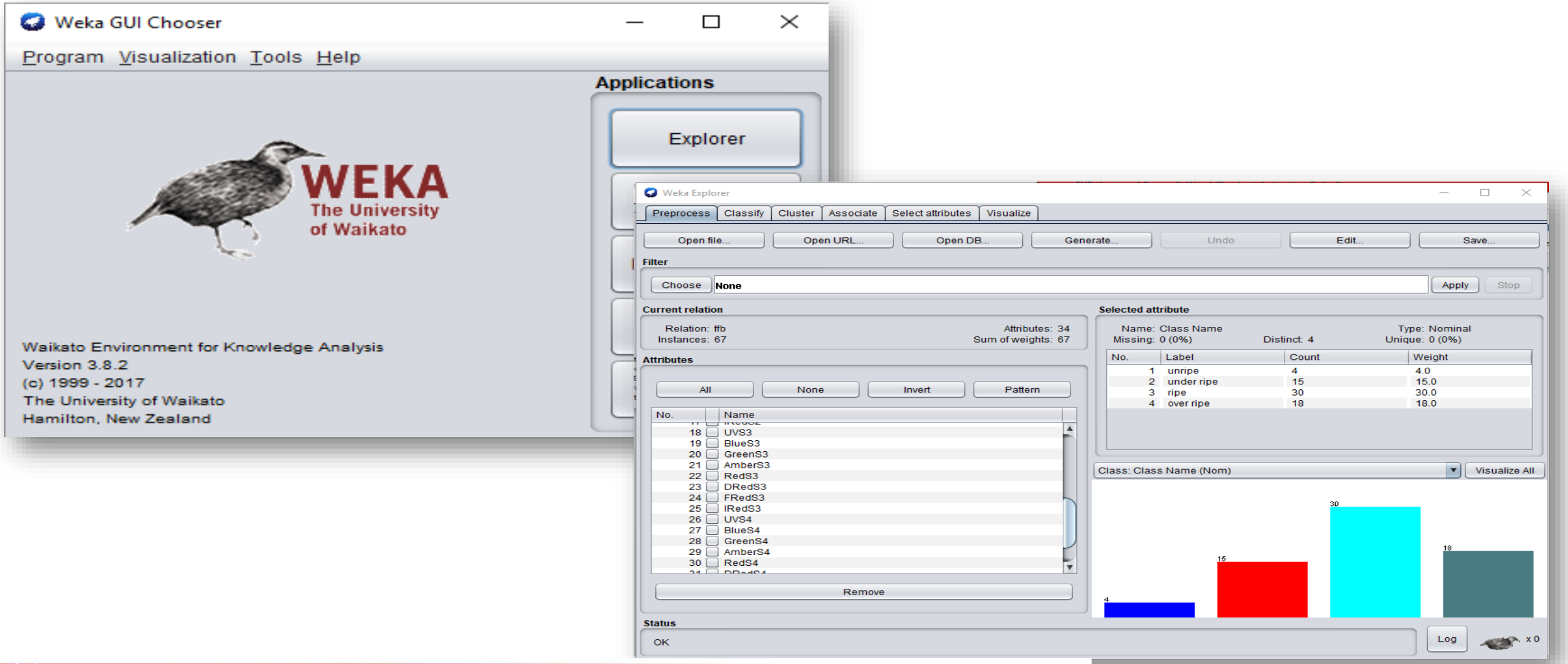
- With automation in mind, the study intends to design, fabricate and evaluate a prototype of oil palm fresh fruit bunches fluorescence sensor

Technical Information Of OPRID

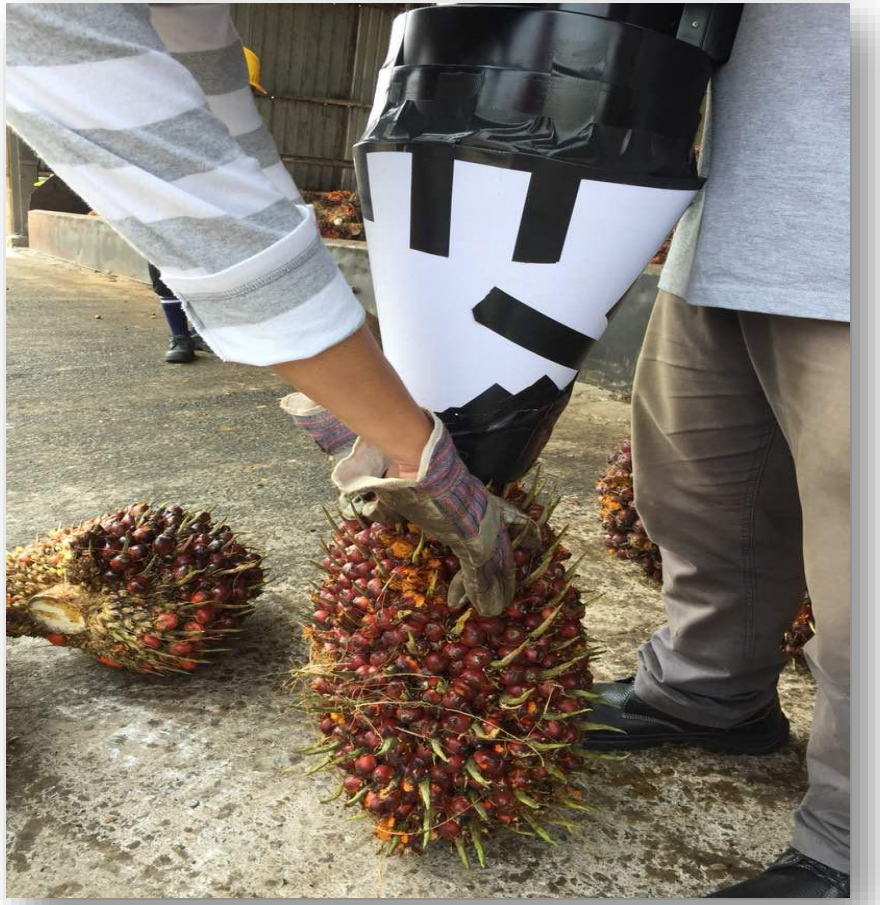


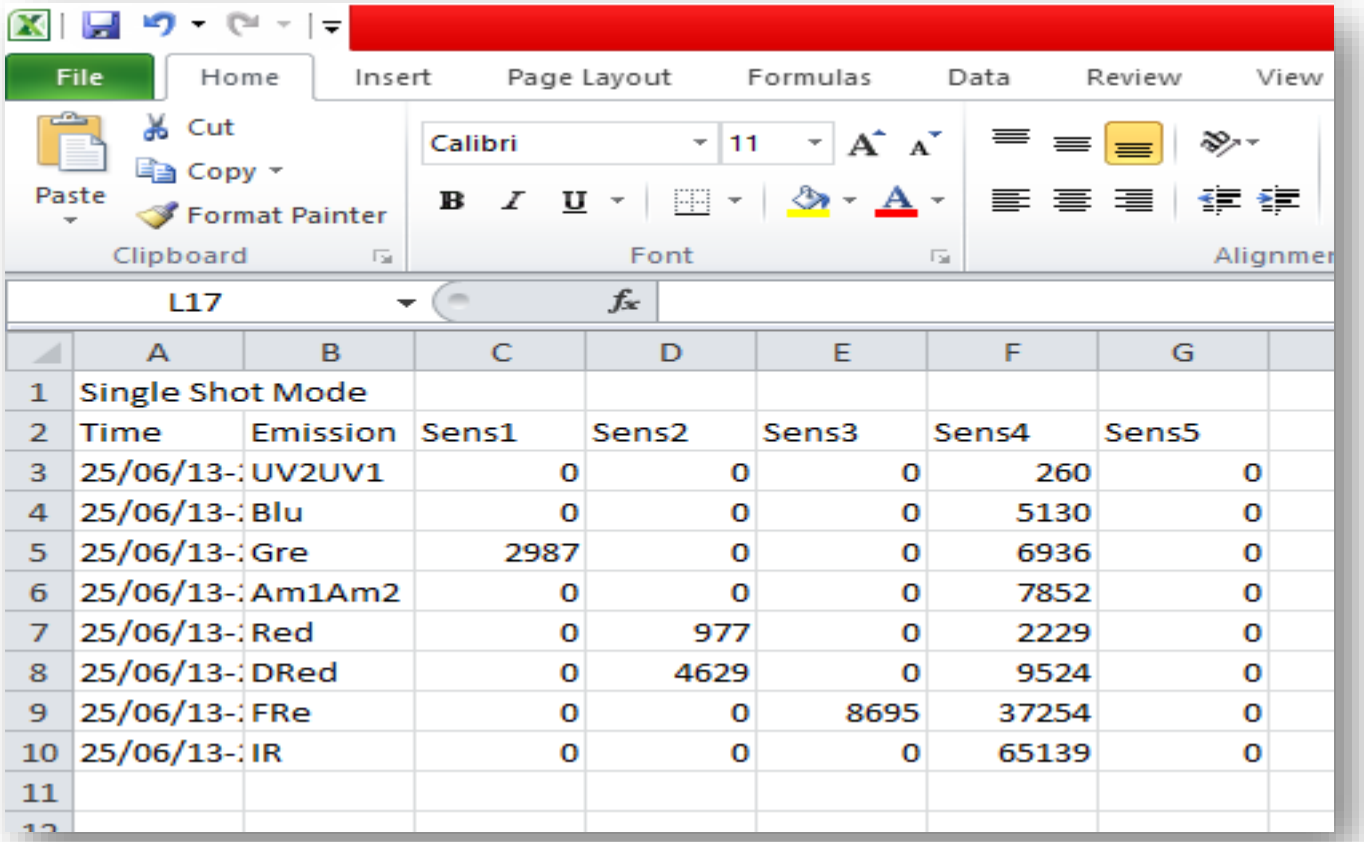
Our Prototype Sensor

Methodology



Methodology





	A	B	C	D	E	F	G
1	Single Shot Mode						
2	Time	Emission	Sens1	Sens2	Sens3	Sens4	Sens5
3	25/06/13-:	UV2UV1	0	0	0	260	0
4	25/06/13-:	Blu	0	0	0	5130	0
5	25/06/13-:	Gre	2987	0	0	6936	0
6	25/06/13-:	Am1Am2	0	0	0	7852	0
7	25/06/13-:	Red	0	977	0	2229	0
8	25/06/13-:	DRed	0	4629	0	9524	0
9	25/06/13-:	FRe	0	0	8695	37254	0
10	25/06/13-:	IR	0	0	0	65139	0
11							

Results

	Highest accuracy	Models	Algorithms
First experiment	100%	RedS2, RedS4, FRedS4, IRedS4	Logistic, Simple Logistic, LMT,
Second experiment	98.5%	RedS4	Logistic

Terima Kasih
Thank You

Interested for collaboration and commercialization;

Innovation Promotion & Marketing Division,
Putra Science Park,
Universiti Putra Malaysia
Serdang, Selangor

Tel : 03-9769 1254/ | promosi@upm.edu.my

For other potential products:

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