

# **Harry Kwok-hung Lo**

## **Supplementary Materials**

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## Assignments in Ara

### Sudoku game, using C#

Timer, Ensure-valid-input, Row-complete, Square-Complete, No-override-default, Game-complete Functions

Game begins

All initial values loaded in the beginning cannot be overridden

Game finishes

Timer  
Indicating Game Completion with time

Completed Row(s) Number: (Topmost is Row 1)  
Completed Column(s) Number:  
Completed Square(s) Number:  
Red font color indicates either row, column or square of the cell to be completed

Completed Row(s) Number: (Topmost is Row 1)  
Completed Column(s) Number:  
Completed Square(s) Number:  
Input selection pad ensures valid input

Completed Row(s) Number: (Topmost is Row 1)  
Completed Column(s) Number:  
Completed Square(s) Number:  
Red font color indicates either row, column or square of the cell to be completed

### Bilingual Website, using PHP & MySQL

#### Login Feature

➤ Scenario 3: Incorrect password (continued)

Red messages prompt users that the incorrect password and filling the form again, after clicking the submit button without correct password. The form has not been submitted

English Language

Not a valid Password, Please try again!

Bengali Language

Bengali Language

এক প্রয়োগ করা হয়েছে, আপনার পাসওর্ড

Not match with the hashed password

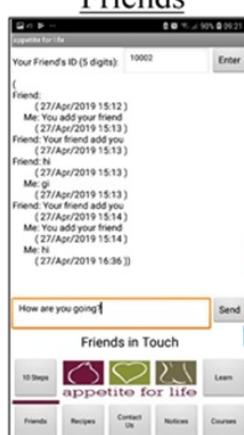
Register table of database

Language switch through the hypertext link

## Assignments in Ara

# Android Mobile app Wireframe, using MIT App Inventor & Firebase

### Friends



### About Us



### Learn



### 10 Steps



### Firebase Database



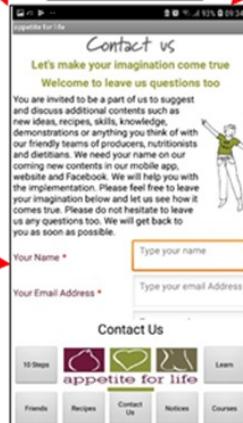
### Courses



### Recipes



### Contact Us



### Notices



## Assignments in Ara

# Responsive Website, using HTML, CSS & JavaScript

← → C Not secure | harrylo.duckdns.org/yeoldebookshop/about-us.html

Home
About Us
Featured Author/Book
New Arrivals
Restorations
Showcase
Valuations
Enquiry

### New Arrival

1839 1stED The Arabian Nights Aladdin Illustrated Fine Leather Bindings 10"x6.5"



Whether you are interested in children's books or adult books, our dedicated and knowledgeable staff of bookstore professionals is on hand to answer your questions or offer suggestions as needed. We can order any current title that is not in stock and have it in a day or two, and we also search for elusive out-of-print titles. Inquiries and orders can also be handled by phone without the frustration of automated systems and menus. Gift wrapping is complimentary and telephone, email, and internet orders are shipped immediately. In person or by phone, our service is always personal. Many out-of-town customers, who discovered us when visiting Carnegie Hill, have become long-distance regulars, preferring our personal service to the anonymity of the Internet and secure in the knowledge that their requests will receive the closest possible attention.

### About Us



A member of XXX and the XXXX of his class at XXXX College, Harry went on to work in the restaurant business before joining us in 1866. In short time, his interest in and knowledge of history and literature made him a natural to assume the responsibilities of store buyer and manager, positions he holds to this day. Harry abides by the following, "People say that life is the thing, but I prefer reading."

### Coming Events

Ye Olde Book Group  
17 May 2019 5-7pm  
Shakespearean Characters



### Showcase

Rudyard Kipling "The Jungle Book"




A XXX graduate from XXX College with a major in English, Peter continued his education at XXXX University where he received an MA in English and Comparative Literature. Before coming to The Corner Bookstore, Peter worked as a math teacher, a graduate research assistant, and an editorial intern. Peter joined our sales staff in 1887, and is now our office manager and events coordinator for our frequent authors' readings. "Of all my responsibilities in the bookstore, my favorite is organizing our

### Harry

A member of XXX and the XXXX of his class at XXXX College, Harry went on to work in the restaurant business before joining us in 1866. In short time, his interest in and knowledge of history and literature made him a natural to assume the responsibilities of store buyer and manager, positions he holds to this day. Harry abides by the following, "People say that life is the thing, but I prefer reading."

### Peter

A XXX graduate from XXX College with a major in English, Peter continued his education at XXXX University where he received an MA in English and Comparative Literature. Before coming to The Corner Bookstore, Peter worked as a math teacher, a graduate research assistant, and an editorial intern. Peter joined our sales staff in 1887, and is now our office manager and events coordinator for our frequent authors' readings. "Of all my responsibilities in the bookstore, my favorite is organizing our

### Quick Enquiry

Name:

Email:

Message:

Not a robot:

**Submit**

### Restorations

Before

## Final Year Project in Ara


**Hedgebook**  
[LinkedIn](#)

Harry Lo, Graduate Diploma in Information and Communication Technologies,  
Industry Supervisor: Mr. Ian Ross; Academic Supervisor: Dr. Luofeng Xu;

### Flexible & Maintainable ReactJs Web App Reducing Maintenance Cost

Project: Test Driven Development Builds Flexible and Maintainable FinTech ReactJs Web Application of Hedgebook



Ara Institute of Canterbury.  
Course Supervisor: Dr. David Weir.

**Learning Outcomes**
**Tests**

**Background**

A flexible and maintainable FinTech ReactJs Web Application is required for supporting large clients' new users.

**APIs** This project bridged the gaps between two asyn. projects

Small workable features and tasks

- Liaisons
- Tests
- Backlog Grooming

Kanban Management



Your entire project, in a single glance.

**Refactor**

Test Driven Development (TDD)

Jest Testing Framework

**Products**

Pass

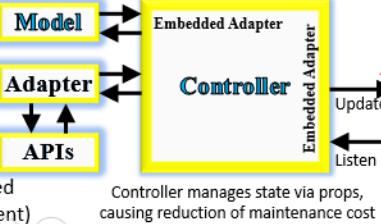
**Project Outcomes**
**Achieved Features**

**Implement Proposed MCRV Architecture**

Proposed Model-Controller-ReactJsView (MCRV) Architecture

Characteristics:

- Loose Coupling
- High Cohesion
- Flexible
- Maintainable
- No State Prop Drilling (Improved State Management)



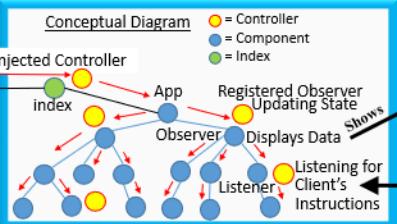
Controller manages state via props, causing reduction of maintenance cost

Improved

**ReactJsView**

Conceptual Diagram

- = Controller
- = Component
- = Index



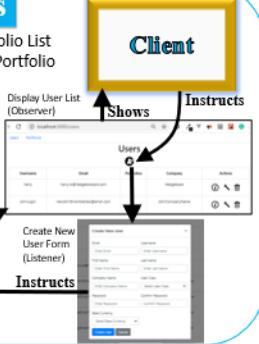
Display User List (Observer) Shows Instructs

Display Portfolio List

Create New User

Create New Portfolio

**Client**



Shows Instructs

Display User List (Observer)

Display Portfolio List

Create New User

Create New Portfolio

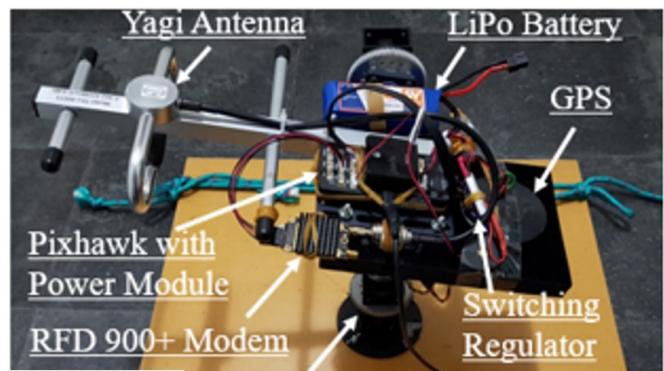
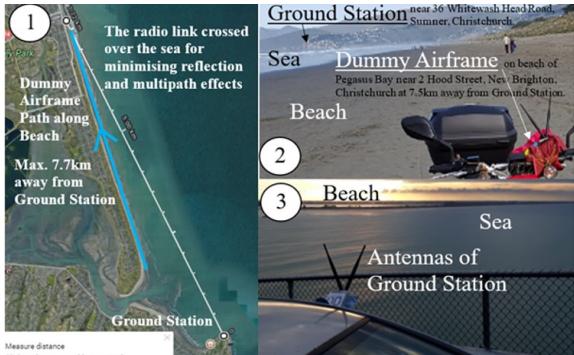
Creates New User Form (Listener)

Shows Instructs

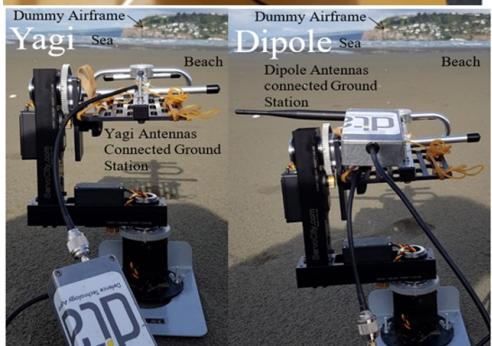
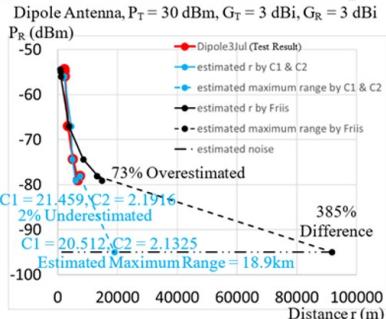
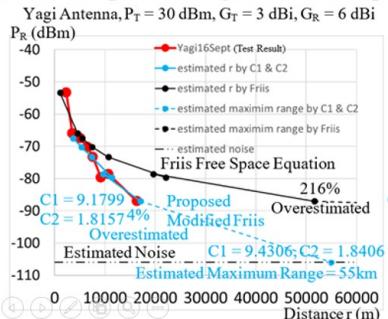
Listening for Client's Instructions

## Final Year Project in UC

# Antenna Tracker, Radio Signal Tests & Radio Signal Estimations



Received-power-range Relationship (Received Power vs. Distance Apart)



## Personal Projects

### GitHub Page

<https://harrykhlo.github.io/>



### Raspberry Pi LAMP Server

<http://www.harrylo.duckdns.org>



### Website, using MadCap Flare Content Authoring Tool

<http://www.harrylo.duckdns.org/All-About-San-Diego-HTML5/Content/Home.htm>

The screenshot shows a website for "All About San Diego". The header features a logo and the text "SAN DIEGO, CA". Below the header is a large image of the San Diego skyline at sunset. The main content area has a "Welcome" section with a paragraph about San Diego and a bulleted list of local attractions. At the bottom, there is contact information and a copyright notice. The footer contains a "New Store" table with three rows of data:

Name	Address	Actions	Actions
Store Name id1	Store Address id1	<button>Edit</button>	<button>Delete</button>
Store Name id2	Store Address id2	<button>Edit</button>	<button>Delete</button>
Store Name id6	Store Address id6	<button>Edit</button>	<button>Delete</button>

### Web App in Azure, using C#, React Js, MS SQL, ASP.NET Core & Entity Framework

<https://onlinebusiness.azurewebsites.net/Store>

The screenshot shows a Microsoft Azure web application for managing stores. The top navigation bar includes links for SaleRecord, Introduction, Customer, Product, Store, and Sales. The main content area is titled "New Store" and displays a table with three rows of data. The table has columns for Name, Address, Actions (Edit and Delete buttons), and another Actions column.

Name	Address	Actions	Actions
Store Name id1	Store Address id1	<button>Edit</button>	<button>Delete</button>
Store Name id2	Store Address id2	<button>Edit</button>	<button>Delete</button>
Store Name id6	Store Address id6	<button>Edit</button>	<button>Delete</button>

## Referee Reports

### Scholarships Referee Report



#### Supporting documentation to be supplied

Applicant Harry Kwok-hung Lo

Date of birth 09/02/1972 /yyyy

**The above details are to be completed by the applicant.**

Please see notes over page before completing this form.

Please place a cross (x) on the scale to indicate your assessment of the applicant in relation to each of the qualities.

#### Personal qualities

Honest	<input checked="" type="checkbox"/>	Dishonest
Mature	<input checked="" type="checkbox"/>	Immature
Reliable (attendance)	<input checked="" type="checkbox"/>	Unreliable
Tolerant	<input checked="" type="checkbox"/>	Intolerant
Accepts responsibility	<input checked="" type="checkbox"/>	Avoids responsibility

Comments: Harry was a pleasure to work with throughout the project and prior to that as a student.

#### Personal qualities:

- Pleasure to work with

#### Interpersonal relationships

Relationships with peers	Friendly, supportive	<input checked="" type="checkbox"/>	
Relationships with people with authority	Open, constructive	<input checked="" type="checkbox"/>	
Consideration for others	Accepting, considerate	<input checked="" type="checkbox"/>	
Communication skills with others	Effective, clear	<input checked="" type="checkbox"/>	Vague, Inconsistent

#### Interpersonal relationships:

- Great addition to my team; and
- Well liked by the postgraduate students he worked with

Comments: Harry was a great addition to my team and well liked by the Postgraduate Students he worked with.

#### Attitudes to work/study

Perseverance	Appropriately persistent	<input checked="" type="checkbox"/>	Easily distracted
Cooperation with others	Participative	<input checked="" type="checkbox"/>	Isolated
Application to work/study	Excellent	<input checked="" type="checkbox"/>	Poor
Acceptance of correction	Accepting questions appropriately	<input checked="" type="checkbox"/>	Resistant, defensive
Initiative	Motivated, appropriately independent	<input checked="" type="checkbox"/>	Awaits direction
Information seeking	Enquiring	<input checked="" type="checkbox"/>	Uninterested

Comments: I am extremely satisfied with both the results of Harry's work, as well as his approach to work and study.

#### Attitude to work / study:

- Extremely satisfied with both the results of Harry's work as well as his approach.

## Referee Reports

### General comment:

- Significantly advanced our research;
- Great initiative on a complex subject.

### Strengths and qualities:

- Excellent technical understanding;
- Excellent independent research capabilities;
- Very pleasant to interact with my group;
- Well liked by my group; and
- Well above those of an average student

### General

If you have been the applicant's employer please describe the job/role the applicant was responsible for.

*Harry worked for me as a summer research student at the University of Canterbury in 2017. His project involved the development of software for a biomedical application.*

Please add any general comment about the applicant's performance at work/school.

*I was very satisfied with Harry's performance on the project. His contribution significantly advanced our research and he showed great initiative on a complex subject.*

What are the applicant's relevant strengths and qualities?

*Harry showed excellent technical understanding and independent research capabilities. He was very pleasant to interact with and well liked by my group. The results he delivered were well above those of an average student.*

Do you consider the applicant able to undertake a flexible programme of study?

Yes  No

Comments *Harry demonstrated very good work ethics and delivered results beyond of what was expected well ahead of time.*

Any other comments:

*I highly recommend Harry for this scholarship and would be very happy to again employ him in the future.*

Signature:

Date:

*31.01.2019*

Name:

*Volker Nock*

Position:

*Senior Lecturer above the Bar*

Address:

*Electrical and Computer Engineering, University of Canterbury, Christchurch*

Relationship to applicant  
(eg employer, teacher etc)

*Employer / Teacher*

Department of  
Electrical & Computer Engineering  
University of Canterbury  
Private Bag 4800  
CHRISTCHURCH, New Zealand

- Very good work ethics; and
- Delivered results beyond of what was expected well ahead of time.

### Notes

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## Referee Reports

### Scholarships Referee Report



#### Supporting documentation to be supplied

Applicant Harry Kwok-hung Lo

Date of birth 09/02/1972

**The above details are to be completed by the applicant.**

Please see notes over page before completing this form.

Please place a cross (x) on the scale to indicate your assessment of the applicant in relation to each of the qualities.

#### Personal qualities

Honest                     \_\_\_\_\_  
 Mature                     \_\_\_\_\_  
 Reliable (attendance)  \_\_\_\_\_  
 Tolerant                  \_\_\_\_\_  
 Accepts responsibility  \_\_\_\_\_

#### Personal qualities:

- conscientious;
- diligent;
- demonstrates initiative;
- self management;
- responsibility; and
- high standards of attention to detail.

Avoids responsibility

Comments: Harry is a conscientious and diligent worker, who demonstrates initiative, self management, responsibility, and high standards of attention to detail

#### Interpersonal relationships

Relationships with peers      Friendly, supportive  
 Relationships with people with authority      Open, constructive  
 Consideration for others      Accepting, considerate  
 Communication skills with others      Effective, clear

#### Interpersonal relationships:

- Friendly;
- Supportive; and
- Co-works well with others.

Comments: While being friendly and supportive when communicating, Harry also tends to put his head down and get on with the job. He co-works well with others, and has good English

#### Attitudes to work/study

Perseverance	Appropriately persistent <input checked="" type="checkbox"/> _____	Easily distracted
Cooperation with others	Participative <input checked="" type="checkbox"/> _____	Isolated
Application to work/study	Excellent <input checked="" type="checkbox"/> _____	Poor
Acceptance of correction	Accepting questions appropriately <input checked="" type="checkbox"/> _____	Resistant, defensive
Initiative	Motivated, appropriately independent <input checked="" type="checkbox"/> _____	Awaits direction
Information seeking	Enquiring <input checked="" type="checkbox"/> _____	Uninterested

Comments: As above, Harry knows when to focus on getting work done - but will communicate, cooperate and self-manage when required

#### Attitudes to work:

- Getting work done
- communicate
- cooperate
- self-managing

## Referee Reports

### General

If you have been the applicant's employer please describe the job/role the applicant was responsible for.

**Assembly technician - Harry assembled electronic components for the Electric Garden, including soldering, glueing, firmware deployment and QA testing**

Please add any general comment about the applicant's performance at work/school.

**Harry was an extremely diligent employee, who would arrive early, stay late, and go above and beyond to ensure a high standard of detail. He has good knowledge of hardware and software in technology systems, is always amicable, and capable of self managing**

What are the applicant's relevant strengths and qualities?

**Friendly / willing / open**

**Problem solving**

**Suggesting and implementing improvements**

Do you consider the applicant able to undertake a flexible programme of study?

Yes  No

Comments **Absolutely. I felt Harry's talents were severely underutilised during his employment**

Any other comments:

**Harry is a genuine and intelligent character who is capable of great potential, I wish him all the very best with generating opportunities to utilise his talents**

Signature:

Date:

**29 January 2019**

Name:

**Matt Scott**

Position:

**Project Manager**

Address:

Relationship to applicant  
(eg employer, teacher etc)

**Former employer**

### General comment:

- Diligent employee
- Go above and beyond to ensure a high standard of detail
- Amicable
- Capable of self-managing

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### Strengths and qualities:

- Friendly;
- Willing;
- Open;
- Problem solving; and
- Suggesting and implementing improvement.

# Referee Reports

		
<b>Scholarships Referee Report</b>		
<b>Supporting documentation to be supplied</b>		
Applicant	Harry Kwok-hung Lo	
Date of birth	09/02/1972	
<i>The above details are to be completed by the applicant.</i> Please see notes over page before completing this form. Please place a cross (x) on the scale to indicate your assessment of the applicant in relation to each of the qualities.		
<b>Personal qualities</b>		
Honest	X	Dishonest
Mature	X	Immature
Reliable (attendance)	X	Unreliable
Tolerant	X	Intolerant
Accepts responsibility	X	Avoids responsibility
Comments: Harry has a Go getter attitude which excels him in the workplace.		
<b>Interpersonal relationships</b>		<b>Interpersonal relationships:</b> <ul style="list-style-type: none"> <li>• friendly;</li> <li>• approachable; and</li> <li>• strives on his own success and the success of others.</li> </ul>
Relationships with peers	X	Vague, inconsistent
Relationships with people with authority	X	
Consideration for others	X	
Communication skills with others	X	
Comments: Harry is a valued member of the team, he is a very friendly and approachable individual that thrives on his own success and the success of others.		
<b>Attitudes to work/study</b>		<b>Attitudes to work:</b> <ul style="list-style-type: none"> <li>• Great at getting task completed; and</li> <li>• Not afraid to speak up or research to ensure doing the task properly.</li> </ul>
Perseverance	X	Uninterested
Cooperation with others	X	
Application to work/study	X	
Acceptance of correction	X	
Initiative	X	
Information seeking	X	
Comments: Harry is great at getting a task and completing it to a deadline. If he is unsure on the answer he is not afraid to speak up or research to ensure he is doing the task properly.		

## Referee Reports

### **General**

If you have been the applicant's employer please describe the job/role the applicant was responsible for.

*High voltage harness building for aerospace.*

#### General comments:

- Valued member;
- Honest; and
- realisable.

Please add any general comment about the applicant's performance at work/school:

*as previously mentioned Harry is a valued member of the team, he thrives on success and is a very honest and reliable person.*

What are the applicant's relevant strengths and qualities?

*ability to ask the appropriate questions, team player, Hardworker.*

Do you consider the applicant able to undertake a flexible programme of study?

Yes  No

Comments

#### Strengths and qualities:

- Team player; and
- Hard worker.

Any other comments:

Signature:

Date:

*14/2/2019*

Name:

*Toni Long*

Position:

*HR Generalist ANZ Te Connectivity*

Address:

*14 Many Muller Drive Christchurch.*

Relationship to applicant  
(eg employer, teacher etc)

*HR.*

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## Awards



### Skills Shortage Scholarship

This has been awarded to

**Harry Lo**

Awarded on  
**11 April 2019**

*P.Neek*

Department of Computing



### Outstanding Academic Performance

The Department of Enterprise and Digital Innovation, Ara Institute of Canterbury presents this award in 2019 to

**Harry Lo**

in

**Semester 2**

Awarded on  
**18 December 2019**

*N.Y.*

Nigel Young  
Head of Department  
Enterprise and Digital Innovation

## Awards



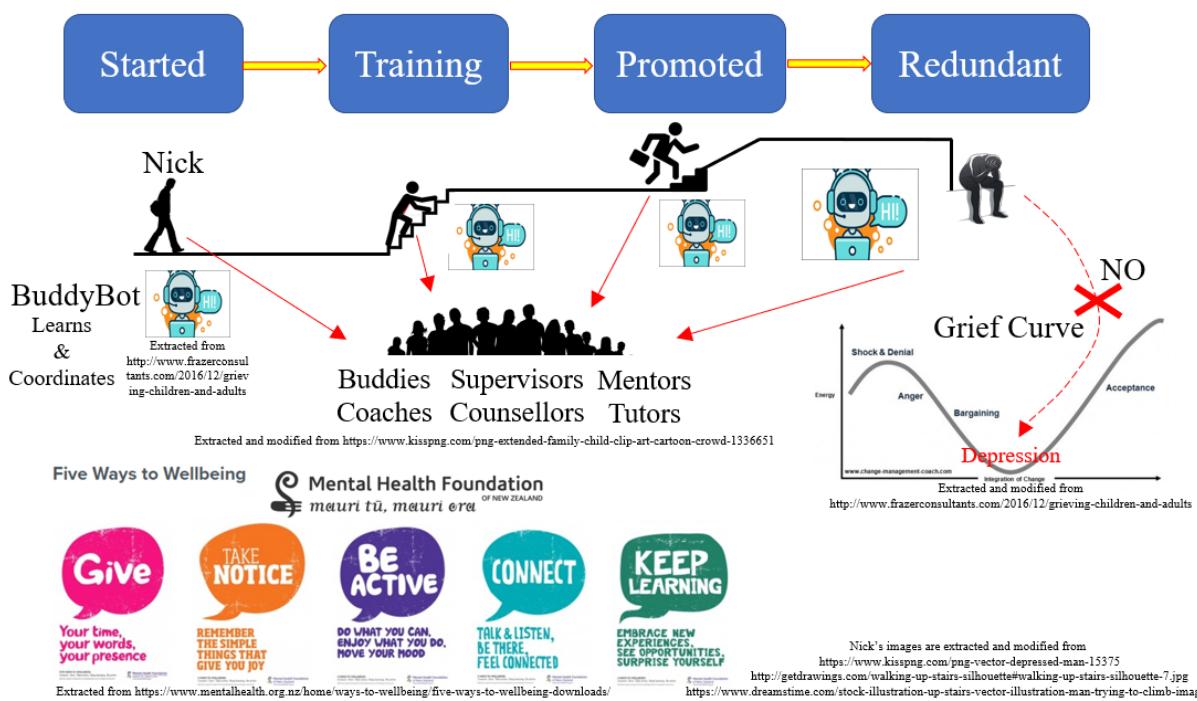
Thank you for your hard work creating and designing a complex end to end database system.  
This will help the analysis of the signal tester log files used by Vector Advanced Metering Services Australia.

Nominated by  
Andy Shang  
Embedded Systems Engineer

## Awards



I Proposed a chatbot for guiding people getting into the five ways to wellbeing  
in Robert Walters Hackathon 2018  
[My team got first runner up](#)



## Awards

I got Summer research scholarship from this project

**Project Title: Software to measure forces exerted by invasive microorganisms**

Student: Harry Lo

Supervisor: Dr. Volker Nock

### Aim of the project

Build a Graphical User Interface (GUI)

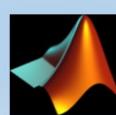
providing a control and parameter input to two software Fiji and MATLAB  
in order to simplify and speed up the procedure of the protrusive force determination



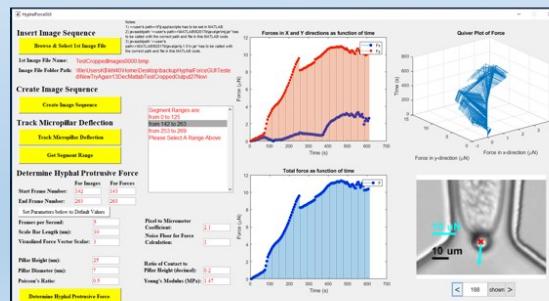
Lab-on-a-chip platform [1]



Fiji [2]



MATLAB [3]



GUI gives Hyphal Protrusive Forces



Summer Research Scholarship  
2017/2018

**Golden Key International Honour Society**

*This Certifies That*

*Kwok Lo*

*is hereby granted all honours, benefits and privileges  
pertaining to membership of the Society based on  
top 15% academic achievement, as validated by*

*University of Canterbury*

*Brodford W. Kainay*  
Executive Director



Membership ID # :14274733

Effective at: 11 July 2017