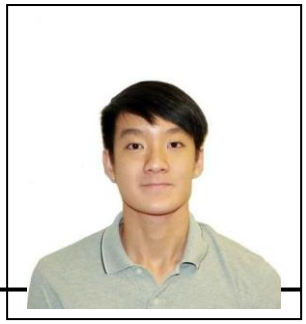
Ronald Zhi Yang WEE
Mobile: +65 97878992
Email: ronald.wee@u.nus.edu
Linkedin: https://www.linkedin.com/in/ronald-wee-73057a1a2/



Personal Statement

I am Ronald Wee, a Mechanical Engineering undergraduate with a second major in Innovation and Design from National University of Singapore (NUS). I am looking for a technical role which I believe I can contribute and learn most in.

About me
I was exposed to design thinking and entrepreneurial skills as part of my second major in Innovation and Design. I learnt to uncover deeper insights about user needs and develop systematic solutions for technical design and prototyping. All these skills enabled me to think holistically when solving multi-faceted problems. I am currently working on a design-centric project which involves developing an innovative solution to tackle rain-water issues at public housing estates.

I am currently residing in Eusoff hall, where I had engaged in hall activities such as leading the videography committee. I learnt valuable video editing skills using Adobe Premiere Pro and produced videos for official hall activities. I was also in NUS Entrepreneurship Society as an education liaisons executive. Through many interviews and webinars with startup founders, I strengthened my communication and writing skills. I had published an article on a startup and have hosted a webinar on Fintech Industries.

Going outside of curriculum
During my holidays, I pushed myself to complete courses that were not covered in school. I took an array of courses, ranging from computer science to deep learning to mechatronics. I managed to develop a basic stock-exchange website using HTML, CSS and JavaScript as part of the course's final project. I was also able to develop a remote-controlled obstacle avoiding robot in another course's final project. Throughout these courses, I was exposed to many aspects of engineering and gained programming and electronics skills.

I am currently helping out at Advanced Robotics Centre, where I am in the JetBot team. I was involved in training of a robot in obstacle avoidance, line following and object detection. I am still gaining exposure to the robotics field and I have signed up to be part of the school's Mars Rover Team.

Work Experiences
I did 2 internships at an electrical engineering company, which exposed me to the real world of engineering. I realized engineering was a beautiful combination of many disciplines. Throughout these internships, I picked up mechanical, electrical and electronic engineering skills. I assisted several projects for government organizations like Singapore Armed Forces, Singapore Mass Rapid Transit etc. I gained knowledge in electrical wiring, component testing, computer aided design, as well as mechanical and electrical design. Also, as part of NUS Overseas Colleges experience, I worked at a real estate company as a Research and Development intern, where I honed my research and presentation skills.

I am currently working as an Undergraduate Teaching Assistant for Mechanical Engineering Principles and Practice, having took up this role for 2 semesters in a row. I mostly deal with electrical components such as diodes etc. Therefore, my foundation of electrical knowledge has improved. On top of that, I am a student facilitator in my NUS hall and I am currently guiding several freshmen in their university lives. This has allowed me to further hone my communication and leadership skills.

How I can contribute
I can contribute in various technical areas that require mechanical or electrical & electronics engineering knowledge such as robotics or automation. I can also contribute in machine learning or web development areas.

Education

Aug 2019 - Present	**National University of Singapore** Bachelor of Engineering (Honours) in Mechanical Engineering Second Major in Innovation and Design *(Course details in Appendix A)*	Singapore
Jan 2015 - Dec 2016	**Hwa Chong Junior College** • Singapore-Cambridge General Certificate of Education Advanced Level • Subjects: Physics (A), Chemistry (A), Math (A), Economics (A)	Singapore
Nov 2014 – Dec 2014	Student Exchange Program: Xi'An Jiaotong University	Singapore

Work Experience

May 2021 – Jul 2021	**PT Genesis Indojaya** *Research and Development Intern* • Research on prefabrication technologies such as 3D printing in building construction • Calculated cost savings for green buildings to qualify for green bonds • Presented a business plan on E-commerce logistics delivery solutions	Indonesia (Remote)
May 2020 – Jul 2020	**Flexlink Engineers Pte Ltd** *Mechatronics Design Engineer* • Produced 2D mechanical design and architecture site plan • Produced control wiring diagram, electrical schematics, PLC ladder diagram and flowcharts	Singapore
Mar 2019 - Jul 2019	**Flexlink Engineers Pte Ltd** *Engineering Intern* • Involved in a major engineering projects from companies such as SMRT, SAF, from procurement of sub-components to production and testing • Spearheaded projects for panel building, from design phase to assembly phase, utilizing AutoCAD and electrical wiring knowledge • Published an official document regarding outsourcing of project to overseas contractors for the company, greatly facilitating the process and reducing time lag	Singapore

Scholastic Achievements/Extracurricular Activities

Aug 2019 - Present	**University Contributions** • Education liaisons executive for NUS Entrepreneurship Society • Undergraduate Teaching Assistant for ME2104 Engineering Principles and Practices 1 & 2 (EPP 1 & 2) • Student facilitator and Videography wing head for Eusoff Hall • Student helper at Advanced Robotics Centre NUS	Singapore
Jan 2015 - Dec 2016	**Hwa Chong Junior College** • National Youth Achievement Award • Overseas Community Involvement Program, Sub-committee Leader • Service-Learning Project (Project 'Aegis') Leader	Singapore
Jan 2011 – Dec 2016	**Scholarship** Edusave Scholarships for Independent Schools	Singapore

Skill Sets & Proficiency

Office Productivity	Microsoft Word, PowerPoint, Excel	Proficient
Hardware Design	Circuit Design	Basic
	Electrical Wiring	Intermediate
Web Development	HTML, CSS	Basic
	JavaScript	Basic
Multimedia	Adobe Premiere Pro	Intermediate
Computer Aided Design	Fusion360	Intermediate
	AutoCAD	Intermediate
	SolidWorks	Intermediate
Programming	C	Basic
	C++	Basic
	Python	Intermediate
	Robot Operating System	Basic
Operating Systems	Mac	Intermediate
	Windows	Intermediate
	Linux	Basic
Non-technical Skills	Design Thinking	Intermediate
	Documentation Writing	Basic

Language Proficiency

Spoken	English – fluent; Mandarin – fluent
Written	English – competent; Chinese – competent

Additional Information

Degree: Bachelor of Engineering (Honours) in Mechanical Engineering
Cumulative Average Point: 4.20 / 5.00

Year	Level	Course Description	Grades
Aug – Nov 2019	Year 1/Semester 1	Engineering Principles and Practice I	B+
		Mathematics 1	B+
		Quantitative Reasoning	A-
		Manufacturing Process	B-
		Programming Methodology	CS
Jan – May 2020	Year 1/Semester 2	Engineering Principles and Practice II	A-
		Differential Equations for Engineering	A-
		Design and Make	A-
		Understanding Body, Mind and culture through Sport	A-
		Natural Heritage of Singapore	A
		Asking Questions	CS
		Introduction to Design Thinking	CS
		Linear Algebra With Differential Equations	CS
Aug – Nov 2020	Year 2/Semester 1	Critical Thinking and Writing	A-
		Introduction to Machine Learning	A-
		Fluid Dynamics	A-
		Materials Engineering Principles and Practices	A+
		Strength Of Materials	B
		Introduction to Space Systems	CS
Jan – May 2021	Year 2/Semester 2	Feedback Control Systems	B+
		Engineering Innovation and Modelling	CS
		Mechanics of Machines	B+
		Thermodynamics	B-
		Design Centric Project	In-progress
Aug – Nov 2021	Year 3/Semester 1	Automation	In-progress
		Robot Mechanics and Control	In-progress
		Engineering Professionalism	In-progress
		The Mechatronics Revolution: Fundamentals and Core Concepts	CS
		Design Centric Project	In-progress

NUS Grading Scale:

A+ & A (5.0); A- (4.5); B+ (4.0); B (3.5); B- (3.0); C+ (2.5); C (2.0); D+ (1.5); D (1.0); F (0)

S = Satisfactory; U = Unsatisfactory

CS = Completed Satisfactorily; CU = Completed Unsatisfactorily

EXE = Exempted; IC = Incomplete; IP = In Progress; W = Withdrawn

FLEXLINK ENGINEERS PTE LTD
321A,CHANGI ROAD
SINGAPORE 419796
TEL : 65-6842-0380 FAX : 65-6842-0389

SUBJECT : S9838556H RONALD WEE ZHI YANG

We are an engineering company set up in 1989 and dealing in electronic and electrical engineering design and installations.

Our main customers are Ministry Of Defence, SMRT, SingTel, M1, ST Group (Electronics, Satcom, Marine).

Our company have been accepting interns since 1998 from NTU, NUS, Ngee Ann Polytechnic, Nanyang Polytechnic, Temasek Polytechnic, ITE and at times interns from Monash University.

Ronald, the son of our company accounts executive has indicated to me in 2018 that he has been accepted for engineering degree course in the NUS starting 2019 academic year and that he would like to gain some industrial experience.

He has completed the period of work experience as follows :

Period 1 : Mar-Jul 2019
During this period he has been assigned the u/m tasks :
a. analyse, reconcile and update data for company SAP system involving purchase orders, sales orders, accounts receivables
Note : The SAP software is an internally developed package and he had helped to look out for software short-comings.
b. fabrication of 300pcs of jumper cables for SMRT
c. assemble and test 4 numbers of battery chargers for SAF army camps
d. assist in site installation of battery charger in the SAF army camp.

Period 2 : May-Jul 2020
During this period, he has been involved in an SMRT project to install 6 numbers of battery chargers.

He has accumulated about 100 hours on Autocad in the foll :
a. architecture site plan
b. low voltage single line diagram from sub station to distribution board
c. control wiring diagram
d. panel layout

In order to meet the above objectives, he has to be know the design drawing conventions, line work requirements and mechanical tolerancing.

The exposure gained so far should be able to put Ronald in a good standing in handling any engineering responsibilities that may be assigned to him in future.

Yours sincerely,

Flexlink Engineers Pte Ltd

31/8/2020

Winston Chu
Engineering Manager