NEO YU YAO TERENCE

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EDUCATION

2017-	National University of	Bachelor of Engineering, Electrical Engineering (Hons)
Present	Singapore (NUS)	Bachelor of Science, Business Analytics (2nd Major)
		Intended focus: Computational Intelligence
		Current Cumulative Aggregate Point: 4.85/5
		(Expected 1st Class Honours with Highest Distinction)
		Expected graduation in July 2021
2018	Hanyang University	Summer School, Grade Point Average: 96.2/100
2009-	Hwa Chong Institution	Singapore-Cambridge GCE 'A'-Level Examination
2014		Hwa Chong Science and Math Talent Programme
		Hwa Chong Centre for Scholastic Excellence
2013	University of Cambridge	University Enrichment Course (Advanced Mathematics)
2011	Second High School Attached to Beijing Normal University	Student Exchange Programme

PROGRAMMING SKILLS

Languages Working knowledge with: Python, C, R

Some Experience with: Assembly Language, Verilog, HTML, CSS, C++, JavaScript

Tools andWorking knowledge with:Pandas, Numpy, SKlearnFrameworksSome Experience with:Git, Vivado, LPCXpresso

WORK EXPERIENCE

2015- 2017	Republic of Singapore Air Force (RSAF)	Unmanned Aerial Vehicle Specialist Squadron S2(Intel & Training), Squadron S4(Logs)	 Planned and effectively executed military missions with reconnaissance drones Spearheaded procurement, deployment and inventory tracking of all unit's logistical assets Developed tracking systems with Excel VBA and predictive analytics that reduced unit's logistics manpower requirement by 500% Developed comprehensive training materials, conducted engaging lessons and designed assessments to upgrade intelligence collection capabilities of unit which resulted in 2nd placing in Top Notch Challenge 2016 Awarded coveted Outstanding RSAF Serviceman Award
2011- 2013	Project KeepInTouch (Social Enterprise)	Co-Founder Chairman Head of Finance Head of Marketing and Design (2013) Webmaster	 Founded and led a social enterprise, Project KeepInTouch Incorporated aggressive social media marketing and business modelling that generated consistent daily profits of SGD1,000 for beneficiary TOUCH Community Services Garnered the involvement and support of 56 schools Motivated and mobilised close to 3,000 volunteers Mentored and inspired youths to champion social causes till date Awarded top awards at multiple competitions
2013	Singapore Technologies Kinetics LTD	Intern	Attachment to Mr Teng Tat Chong, Vice President, Chief Technology Office and Mr Tan Sheng Cai, Senior Engineer, Chief Technology Office
2012	Global Foundries	Intern	Attachment to GF Semiconductor Engineering Department

RECENT PROJECTS

Sep 2018 -

Telco Customer Behaviour Prediction with Machine Learning

Oct 2018



 Developed supervised learning models in Python, leveraging on Pandas, Numpy, Sklearn packages to analyse kaggle dataset

• Data pre-processing to maximise cross validation accuracies of predictions

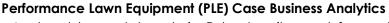
Aug 2018 -

Confusion Matrix Arithmetic on LPC1769 Microcontroller

Sep 2018 • ARM v7-M C Programming with Assembly Language subroutine

- Initiated algorithm optimisation, achieved theoretical minimum space required
- Adopted parallel programming and memoization techniques to achieve a 2.5% run time of original algorithm

Jan 2018 -





- Analysed large data sets in R to describe and forecast business performance, market positioning and satisfaction levels of PLE to generate insights for company
- Utilised prescriptive analysis tools which resulted in optimised processes that maximised business profits and employee satisfaction

Feb 2018 -

Field-Programmable Gate Array (FPGA) Audio Manipulation & Effects in Verilog

Apr 2018



• Signal manipulation for real time audio pitch shifting and sound delay

• Through signal analysis, successfully implemented noise filter and sound merging functions with low level programming

Mar 2018

Line Following Car with Arduino



- Assembled circuitry utilising components such as a L293D dual H-Bridge DIP for motor control, and light dependent resistors as sensors
- Designed scanning algorithm for the car to seek the line from any starting position

CURRENT CO-CURRICULAR ACTIVITIES

IEEE-Eta Kappa	Selected as one of the top Electrical and Computer Engineering undergraduates	
Nu (IEEE-HKN)	for an international honour society that recognizes superior scholarship, attitude	
	and character	
NUS ECE Peer	Identified by NUS Electrical and Computer Engineering Department to conduct	
Tutoring	lessons and mentorship for peers who are not doing as well academically	
NUS Aquathlon (Varsity), Squash, NUS Intellectual Games Club (Chinese Chess)		

OTHER LEADERSHIP POSITIONS

SAF Specialist Cadet School	Leader Platoon Sergeant	2015
Table Tennis	President	2013-2014
Science Students' Research Council	Committee IC (Physics)	2013
Socrates Club (highly selective club that admits	Chairman	2011-2012
top 10 math students of each cohort)	Treasurer	2010-2011
National Affairs Council	Chairman	2012
Hwa Chong High School Council	Councillor	2009-2011
Centre for Scholastic Excellence Council	Councillor	2011-2012
Co-Curricular Activities Council	Councillor	2011-2012

CHAMPIONSHIPS (Peaks of Excellence over the past 10 years)

Top Notch Challenge 2016	2nd (Target Recognition Challenge)	
	2nd (Imagery Intelligence Operations Team)	
-	1st	
25/15 Specialist Cadet Course	1st/Company Best Shot (Section Automatic	
	Weapon)	
	1st/Best Knowledge	
•	5th	
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	Public Outreach Award	
-	Best Volunteer Management Award	
NUS-NIU Astro Challenge	1st (DRQ Round)	
	1st (Project Round)	
	3rd (Observation Round)	
NUIC FOE iDro guo lan accestia a sua d	3rd (Overall)	
	3rd	
	On d /Silver	
Australian National Chemistry Quiz	2nd/Silver	
Lluca Chona Institution 27th Project	Distinction Let (Past Project (Mathematics)	
-	1st/Best Project (Mathematics)	
·	High Distinction	
	1st/Silver (No Cold was gwarded)	
(Junior)	1st/Silver (No Gold was awarded)	
YDSP Science and Technology Camp	1st	
Science Odyssey	2nd	
Aphelion Level Problem Solving	1st	
American Mathematics Contest 8	3rd, Honour Roll Distinction	
	YDSP Science and Technology Camp Science Odyssey Aphelion Level Problem Solving	