NEO YU YAO TERENCE

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EDUCATION

2017-Present	National University of Singapore (NUS)	Bachelor of Engineering, Electrical Engineering (Hons) 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
2009-2014	Hwa Chong Institution	Singapore-Cambridge GCE 'A'-Level Examination 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 and Frameworks	Working knowledge with:	Pandas, Numpy, SKlearn
	Some 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 • 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
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 – Oct 2018	**Telco Customer Behaviour Prediction with Machine Learning**
	• 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 – Sep 2018	**Confusion Matrix Arithmetic on LPC1769 Microcontroller**
	• 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 – Apr 2018	**Performance Lawn Equipment (PLE) Case Business Analytics**
	• 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 – Apr 2018	**Field-Programmable Gate Array (FPGA) Audio Manipulation & Effects in Verilog**
	• 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 Nu (IEEE-HKN)	Selected as one of the top Electrical and Computer Engineering undergraduates for an international honour society that recognizes superior scholarship, attitude and character
NUS ECE Peer Tutoring	Identified by NUS Electrical and Computer Engineering Department to conduct 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 top 10 math students of each cohort)*	Chairman	2011-2012
	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