



# KAWKEEREE KRITTIN

*Robotics Engineer*

*dConstruct Technologies (dC Tech)*

Email: krittin.kawkeeree@gmail.com

Website: <https://www.krittin.me/>

HP Number: (+65) 9176 3438

Date-of-birth: 25<sup>th</sup> NOV 1994

Nationality: Thai

## Education

2020 – PRESENT

**National University of Singapore (NUS)** – Part Time  
*Master of Mechanical Engineering (By Research in Robotics)*  
CAP/GPA: 4.75 / 5.00

2015 – 2019

**National University of Singapore (NUS)**  
*Bachelor of Mechanical Engineering (Honors)*  
CAP/GPA: 4.72 / 5.00 (1<sup>st</sup> Class Honor)

2017 – 2018

**Stanford University @ SCPD (Part of NUS Overseas College)**  
*Entrepreneurship Studies & Internship in Silicon Valley*

## Work Experiences

APR 2021 – PRESENT  
Singapore, Singapore

**dConstruct Technologies (dC Tech)**  
*Robotics Engineer – Core Founding Team Member*

- Autonomous Multi-terrain Navigation System

NOV 2020 – APR 2021  
Singapore, Singapore

**Government Technology Agency (GovTech)**  
*Associate Robotics Engineer*

- Autonomous Indoor-Outdoor Navigation System

AUG 2019 – NOV 2020  
Singapore, Singapore

**Advanced Robotics Centre (ARC) in NUS**  
*Robotics Research Engineer on Autonomous Mobile Robot*

- Autonomous Indoor Navigation System

SEP 2018 – JUL 2019  
Singapore, Singapore

**Internship at Advanced Robotics Centre (ARC) in NUS**  
*Project Lead & Mechanical Engineer for Autonomous Vehicle*

AUG 2017 – JUL 2018  
Silicon Valley, USA

**Internship at C3Nano Inc.**  
*R&D Engineer*

DEC 2016  
Singapore, Singapore

**Internship at Smart Walkie Pte Ltd.**  
*Distributor Sourcing*

## Projects

PRESENT

**Autonomous Boston Dynamics Spot** - <https://youtu.be/G45yMd-mRzc>

JAN 2019 – NOV 2020

**Autonomous Wheelchair** - <https://youtu.be/P273bpFG8p4>

JAN 2019 – NOV 2020

**Autonomous Buggy** (In Partnership with Micron)

JAN 2019

**Hack & Roll 2019** (Hackathon) - [https://youtu.be/ERCPDWpL\\_wOMAY](https://youtu.be/ERCPDWpL_wOMAY)

JUL 2016

**Orbital** (NUS Computing Project) - <https://cleeque.herokuapp.com/>

## Organizational and Committee Experiences

AUG 2016 – MAY 2017

**Director of Student Affairs, College Student Committee (CSC)**

AUG 2015 – MAY 2016

**Executive Committee Member, CAPture (Photography Club)**

AUG 2015 – MAY 2016

**Program Coordinator, Student Affairs Committee**

JULY 2013 – JULY 2014

**Internal Vice-President, 26<sup>th</sup> Student Council**

## Awards

MAY 2019

**NUS Mechanical Engineering Dean's List (Top 5% of Cohort)**

JAN 2019

**Hack and Roll 2019 – Champion (Top 8): People-Following RC Car**

JUN 2017

**NUS Mechanical Engineering Dean's List (Top 5% of Cohort)**

## Additional Information

Programming Languages/Framework

- C++ (11/14/17)
- Python
- ROS, Isaac SDK
- PyTorch

Other Engineering Skills

- CAD (SolidWorks)
- 3D Printing
- Power Distribution System Design
- Microcontroller Programming

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NAME: KRITTIN KAWKEEREE		STUDENT NO: A0142122B		DATE OF BIRTH: 25/11/1994		DATE ISSUED: 11/12/2019									
<b>PROGRAMME:</b> BACHELOR OF ENGINEERING (MECHANICAL ENGINEERING)				<b>MODULE</b>		<b>GRADE</b>		<b>CREDITS</b>							
<b>PROGRAMME STATUS:</b> COMPLETED PROGRAMME				CP3108B INDEPENDENT WORK		CS		4.00							
				ME2113 MECHANICS OF MATERIALS I		B+		3.00							
				ME2121 ENGINEERING THERMODYNAMICS		A+		4.00							
				ME2134 FLUID MECHANICS I		A		4.00							
				ME2151 PRINCIPLES OF MECHANICAL ENG. MATERIALS		A-		4.00							
				ME3162 MANUFACTURING PROCESSES		A		4.00							
				UTW2001Q "WHAT'S IN A WORD?" MEANING ACROSS CULTURES		S		4.00							
<b>MODULE</b>				<b>GRADE</b>		<b>CREDITS</b>									
<b>ACADEMIC YEAR 2015/2016 SEMESTER 1</b>															
CS1010E PROGRAMMING METHODOLOGY		S		4.00		<b>BACHELOR OF ENGINEERING (MECHANICAL ENGINEERING)</b>									
EG1109M STATICS AND MECHANICS OF MATERIALS		S		4.00		<b>CUMULATIVE AVERAGE POINT : 4.79</b>									
ES1102 ENGLISH FOR ACADEMIC PURPOSES		B+		-		<b>ACADEMIC YEAR 2016/2017 SEMESTER 2</b>									
MA1505 MATHEMATICS I		A		4.00		ME2101 FUNDAMENTALS OF MECHANICAL DESIGN				S		4.00			
PC1431 PHYSICS IE		A		4.00		ME2114 MECHANICS OF MATERIALS II				A		3.00			
UTC1402 JR SEM: GENERATION Y: TRANSITIONS TO ADULTHOOD		CS		4.00		ME2135 FLUID MECHANICS II				A		4.00			
<b>BACHELOR OF ENGINEERING (MECHANICAL ENGINEERING)</b>				<b>CUMULATIVE AVERAGE POINT : 5.00</b>				ME2143 SENSORS & ACTUATORS				A		4.00	
<b>ACADEMIC YEAR 2015/2016 SEMESTER 2</b>								ME3112 MECHANICS OF MACHINES				A+		4.00	
EG1108 ELECTRICAL ENGINEERING		A		3.00		UTC2405 EMERGING ASIA: SUCCESSES AND CHALLENGES				B+		4.00			
ES2331 COMMUNICATING ENGINEERING		A-		4.00		<b>BACHELOR OF ENGINEERING (MECHANICAL ENGINEERING)</b>				<b>CUMULATIVE AVERAGE POINT : 4.79</b>					
MA1506 MATHEMATICS II		A+		4.00		<b>DEAN'S LIST</b>									
ME2103 ENGINEERING VISUALIZATION & MODELING		A-		3.00		<b>ACADEMIC YEAR 2017/2018 SEMESTER 1</b>									
UTS2400 IDENTITIES IN ASIA		S		4.00		PARTICIPATED IN THE NUS OVERSEAS COLLEGES PROGRAMME, NOC SILICON VALLEY									
UTW1001K PHOTOGRAPHY AND SOCIETY		S		4.00		CREDITS TRANSFERRED FROM NOC SILICON VALLEY				-		4.00			
<b>BACHELOR OF ENGINEERING (MECHANICAL ENGINEERING)</b>				<b>CUMULATIVE AVERAGE POINT : 4.84</b>				<b>ENROLLED IN THE FOLLOWING NUS MODULES:</b>							
CFG1010 ROOTS AND WINGS - PERSONAL AND INTERPERSONAL EFFECTIVENESS 1.0		CS		-		TR3203N START-UP CASE STUDY & ANALYSIS				IP		8.00			
								TR4049N SEMINARS IN ENTREPRENEURSHIP				A-		4.00	
								<b>BACHELOR OF ENGINEERING (MECHANICAL ENGINEERING)</b>							

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<b>MODULE</b>		<b>GRADE</b>		<b>CREDITS</b>		<b>MODULE</b>	
<b>CUMULATIVE AVERAGE POINT : 4.77</b>				<b>CUMULATIVE AVERAGE POINT : 4.72</b>		<b>DEAN'S LIST</b>	
<b>ACADEMIC YEAR 2017/2018 SEMESTER 2</b>							
PARTICIPATED IN THE NUS OVERSEAS COLLEGES PROGRAMME, NOC SILICON VALLEY						<b>CONFERRED/AWARDED THE DEGREE(S)/DIPLOMA(S) OF:</b>	
CREDITS TRANSFERRED FROM STANFORD UNIVERSITY		-		4.00		<b>BACHELOR OF ENGINEERING (MECHANICAL ENGINEERING) WITH HONOURS (HIGHEST DISTINCTION)</b>	
CREDITS TRANSFERRED FROM NOC SILICON VALLEY		-		20.00		<b>SPECIAL PLAN: COMPLETED THE NUS OVERSEAS COLLEGES PROGRAMME, NOC SILICON VALLEY</b>	
<b>ENROLLED IN THE FOLLOWING NUS MODULES:</b>						<b>COMPLETED THE UNIVERSITY TOWN COLLEGE PROGRAMME AT THE COLLEGE OF ALICE &amp; PETER TAN</b>	
TR3002N	NEW VENTURE CREATION	A	4.00			<b>CONFIRMATION DATE: 30/06/2019</b>	
TR3203N	START-UP CASE STUDY & ANALYSIS	A-	8.00			*****END OF TRANSCRIPT*****	
<b>BACHELOR OF ENGINEERING (MECHANICAL ENGINEERING)</b>		<b>CUMULATIVE AVERAGE POINT : 4.76</b>					
<b>ACADEMIC YEAR 2018/2019 SEMESTER 1</b>							
ME3103	MECHANICAL SYSTEMS DESIGN	B+	6.00				
ME3122	HEAT TRANSFER	B+	4.00				
ME3242	AUTOMATION	A-	4.00				
ME4245	ROBOT MECHANICS AND CONTROL	A	4.00				
<b>BACHELOR OF ENGINEERING (MECHANICAL ENGINEERING)</b>		<b>CUMULATIVE AVERAGE POINT : 4.68</b>					
<b>ACADEMIC YEAR 2018/2019 SEMESTER 2</b>							

EG2401	ENGINEERING PROFESSIONALISM	A	3.00
ME3241	MICROPROCESSOR APPLICATIONS	A	4.00
ME4241	AIRCRAFT PERFORMANCE AND STABILITY	A	4.00
ME4246	MODERN CONTROL SYSTEM	A+	4.00

## BACHELOR OF ENGINEERING (MECHANICAL ENGINEERING)

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**NATIONAL UNIVERSITY OF SINGAPORE (NUS)**  
**Registrar's Office, University Hall (Lee Kong Chian Wing),**  
**#UHL-04-01, 21 Lower Kent Ridge Road,**  
**Singapore 119077**  
**Telephone : (65) 6516 2304**  
**Facsimile : (65) 6778 6371**  
**Website : <http://www.nus.edu.sg/registrar>**

## TRANSCRIPT INFORMATION

*Applicable to Undergraduate and Graduate programmes (unless specified otherwise)*

## MEDIUM OF INSTRUCTION

The medium of instruction used in the University is English, unless specified otherwise.

## GRADE LEGEND

Grade	Grade Point	Additional Grading Options
A+, A	5.00	S Satisfactory
A-	4.50	U Unsatisfactory
B+	4.00	CS Completed (Satisfactory)
B	3.50	CU Completed (Unsatisfactory)
B-	3.00	IC Incomplete
C+	2.50	IP In Progress
C	2.00	AUD Audit
D+	1.50	EXE Exempted
D	1.00	W Withdrawn
F	0.00	WU Withdrawal from University

## CUMULATIVE AVERAGE POINT (CAP)

The Cumulative Average Point (CAP) was introduced for students admitted from the Academic Year (AY) 1998/1999 onwards to track the progress of students under the Modular System. It is the weighted average grade point of all modules taken by the student. Modules with no assigned modular credit or grade point are excluded from the calculation of CAP.

## MODULAR CREDIT (MC)

A modular credit (MC) is a unit of the effort, stated in terms of time, expected of a typical student in managing his/her workload. One MC is equivalent to 2.5 hours of study and preparation per week. Thus, a 4-MC module would require 10 hours of work a week, including lectures, tutorials, laboratory sessions, assignments, and independent or group study, over 13 Instructional Weeks in a semester.

## GRADE-FREE SCHEME (GFS)

The Grade-free Scheme (GFS), in the form of 32 MCs of Satisfactory/Unsatisfactory (S/U) option, was introduced for **undergraduate** students admitted from AY2014/2015 onwards to provide a supportive and enabling environment for them to make a successful transition into the academic and social culture of university life. It serves to facilitate a transformation in students' mindsets towards grades and learning in the university setting, as well as enable them to leverage opportunities for a holistic education. It was enhanced from a grade-free first semester to a grade-free first year for undergraduate students admitted from AY2016/2017 onwards.

At the end of a semester, students may choose to retain the letter grade or to exercise the S/U option on a module, in which case the letter grade will not be shown on the transcript nor computed towards the CAP. An 'S' grade is assigned if students receive a C grade or above while a 'U' grade is assigned if the grade obtained is D+, D or F. Students will receive credits towards the degree only if they attain an 'S' grade.

## DEGREE CLASSIFICATION

The criteria for degree classification applicable to students admitted from AY2012/2013 onwards are as follows:

Honours Degree Classification <sup>(i)</sup>	Criteria
Honours (Highest Distinction)	CAP 4.50 and above <sup>(ii)</sup>
Honours (Distinction)	CAP 4.00 – 4.49
Honours (Merit)	CAP 3.50 – 3.99
Honours	CAP 3.00 – 3.49
Pass	CAP 2.00 – 2.99

Bachelor's Degree Classification <sup>(iii)</sup>	Criteria
Pass with Merit	CAP 3.00 and above
Pass	CAP 2.00 – 2.99

*(i) This refers to 160-MC degree programmes.*

*(ii) Particular Faculties/Schools may stipulate other requirements.*

*(iii) This refers to 120-MC degree programmes.*

## LEAVE OF ABSENCE

Only leave of absence of one semester or longer is recorded in the transcript.

## NUS BULLETIN

More information on the University's programmes is available in the NUS Bulletin at: <http://www.nus.edu.sg/nusbuletin>.

This transcript shows the latest information. For information on earlier grade legends, please visit:  
<http://www.nus.edu.sg/registrar/adminpolicy/transcripts.html>.

For degree verification, please visit:  
<http://www.nus.edu.sg/registrar/administrative-policies/degree-verification.html>.

## CHECK FOR AUTHENTICITY:

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*The following information is specific to the respective Faculties/Schools:*

FACULTY OF DENTISTRY (BDS) /  
YONG LOO LIN SCHOOL OF MEDICINE (MBBS)

## GRADE LEGEND

Grade	Descriptor	Additional Grading Options
A+	Distinction	DT Distinction
A		M Merit
A-		P Pass
B+		IC Incomplete
B		IP In Progress
B-		W Withdrawn
C+		WU Withdrawal from University
C		
F		

## SUPPLEMENTARY EXAMINATION AND RE-EXAMINATION

Students who sit for Supplementary Examination or Re-examination are awarded the grade appropriate to the marks they obtain.

## FACULTY OF LAW (LLB)

## DEGREE CLASSIFICATION

The criteria for degree classification applicable to students conferred their LLB degrees from 30 June 2016 are as follows:

Degree Classification	Criteria
First Class Honours <sup>(i)</sup>	Obtained a Cumulative Weighted Numerical Average for all modules taken at NUS that is equivalent to a grade of A- or better, <u>or</u> finished in the top 10% of the graduating class.
Second Class (Upper Division) Honours <sup>(i)</sup>	Obtained a Cumulative Weighted Numerical Average for all modules taken at NUS that is equivalent to a grade of B or better, and do not qualify for First Class Honours.
Second Class (Lower Division) Honours	Obtained a Cumulative Weighted Numerical Average for all modules taken at NUS that is equivalent to a grade of C or better, and do not qualify either for First Class or Second Class (Upper Division) Honours.
Third Class Honours	Completed the number of credits required for a LLB (Honours) degree but do not qualify for First Class, Second Class (Upper Division) or Second Class (Lower Division) Honours.

*(i) No student will be eligible for First Class or Second Class (Upper Division) Honours if:*

- the student has failed more than 12 credits of modules at NUS (or while on an approved exchange programme); or*
- the student has taken more than 9 semesters to complete the 4-year LLB programme or 7 semesters to complete the 3-year Graduate LLB programme (excluding periods where the student has been granted a leave of absence).*

## SUPPLEMENTARY EXAMINATION (applicable to all LAW Programmes)

With effect from AY2018/2019, students who pass a module by Supplementary Examination will receive the grade appropriate to the marks obtained, instead of only receiving a 'D' grade irrespective of the student's performance in the Supplementary Examination.



Xiqiang Yang, Ph.D.  
Director of R&D  
C3Nano, Inc.  
3988 Trust Way  
Hayward, CA 94545  
USA

February 27, 2019

To Whom It May Concern:

It is with great pleasure that I am writing this letter to support Krittin's employment at the SIMTech-NUS Industrial Robotics Joint Lab.

Krittin spent a year (August 2017 – July 2018) as a Research and Development Intern at C3Nano, Inc., a start-up company specializing in advanced materials. As Director of R&D, I had a very close working relationship with Krittin during his stay. He was always on top of the experimental designs and results, managing complicated datasets, and presenting findings in a well-organized and clear fashion. At C3Nano, we have regularly hired interns from NUS and treated them as regular employees. Of the more than 10 interns we have had, Krittin definitely ranks at the top in terms of the combination of intelligence, ability, attitude, productivity, and reliability. I had him specifically work on a hard coat project and in dealing with customers I totally relied on him for getting the experiments done and providing the data and results.

During his stay, he worked with other engineers in the R&D department and throughout the company and helped with many important projects in nanomaterials purification, transparent conductive inks and film coating, film patterning, thin film stacking and evaluation, and optical and electrical measurements. To be able to carry out so many different tasks in the lab was definitely an indication of Krittin's outstanding learning ability and dedication. In the second half of his internship he became the main contact for optics study, reliability evaluation, and mechanical tests of optical films.

Another valuable trait of Krittin was that he works well with engineers of different backgrounds. He was not only an excellent team player but also vocal enough to help advance projects in the right direction. His judgement, prioritization, and can-do attitude served him very well, and people who worked with him surely had missed him very much after he left.

In short, I would not hesitate to get Krittin on my team and assign him to the most complicated and difficult projects. I whole-heartedly recommend Krittin for employment at the SIMTech-NUS Industrial Robotics Joint Lab.

Please do not hesitate if you need any further information or feedback.

Sincerely,

Xiqiang Yang

4<sup>th</sup> March 2019

Dear Sir/Madam,

I was the Physics tutor for Krittin Kawkeeree for 2 years in Serangoon Junior College.

Krittin Kawkeeree was an all-rounded student who performed exceptionally well in both academic and co-curricular activities. He was a dependable, efficient and friendly leader who took his responsibility seriously.

Despite the heavy workload as the Vice-President of the Student Council, Krittin managed his time very well. In class, he was an engaged learner and participated actively in discussions. He would also find time to revise and proactively seek clarifications whenever he was unclear demonstrating his willingness to learn. He put in a lot of effort in everything he did. Because of his efficiency and time-management skill, he performed well consistently throughout his 2 years in Serangoon Junior College.

Despite doing well academically and in his co-curricular activity, Krittin was an extremely humble student. He was always courteous to his tutors and did not hesitate to share his knowledge or to coach his weaker peers. He was also a friendly student who bonded and worked very well with his peers. These are qualities which, I believe, are essential for every organisation.

Overall, Krittin Kawkeeree is a fine young gentleman and will be a valuable member of any companies. With his experiences and personality, I would definitely recommend him for a place in your esteemed organisation. If you would like more information, you may reach me by email at [loo\\_wee\\_ping@schools.gov.sg](mailto:loo_wee_ping@schools.gov.sg) . Thank you.

Sincerely,

Loo Wee Ping (Ms)

Subject Head (Physics) and Physics Tutor

Anderson Serangoon Junior College

Krittin Kawkeeree completed his one-month December internship at Smart Walkie Pte Ltd. His main task was to source for a distributor in Malaysia. Apart from the distributor sourcing, he revamped the company website and helped in solving problems for the company. Despite being an engineering student, he handled the tasks well and professionally. He asked constructive questions and shared thoughtful opinion which helped in the business development. Apart from following up with potential distributors in Malaysia, Mexico and USA, he managed to secure a partnership agreement with the company's Chinese manufacturer.

*"10/10 I would hire Krittin again.*

*10/10 I would invest if he starts his own company"*

- Zhou Wenhan CEO, Smart Walkie Pte Ltd

Krittin is a determined and hardworking individual. He invested his best effort to complete tasks given to him and took his responsibility seriously. He was also highly motivated and willing to learn new things. To gain more knowledge so as to complete the task given to him, he did his own research and self-study outside working hours. He would then applied what he learned in tasks that he was working on. He also worked quickly and independently to meet his self-set deadlines.

Additionally, he was a friendly and effective team player who was a great addition to the team dynamics. He helped his colleagues in times of emergency. He once went down to Shangri-la Hotel Sentosa to solve a problem for the company's clients.

Overall, Krittin Kawkeeree was a fine and valuable member of Smart Walkie. He possessed necessary skills and would be a valuable member of any organisations. With his experience and personality, I would definitely recommend him for a place in any esteemed organizations. If you would like more information, you may reach me via email at [wenhan@smartwalkietalkie.com](mailto:wenhan@smartwalkietalkie.com) . Thank you!

Sincerely,

Zhou Wenhan  
CEO  
Smart Walkie Pte Ltd.