

# Walter TAY Ann Lee

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## EDUCATION

### NATIONAL UNIVERSITY OF SINGAPORE (NUS)

BENG IN MECHANICAL ENGINEERING  
UNIVERSITY SCHOLARS PROGRAMME  
Cumulative Average Point: 4.44 / 5.00

### BILKENT UNIVERSITY

STUDENT EXCHANGE PROGRAMME  
Jan. 2019 - May 2019 | Ankara, Turkey

## COURSEWORK

### ENGINEERING

Deep Reinforcement Learning  
Finite Elements  
Mechatronic Systems  
Feedback Control Systems  
Materials for Engineers  
Manufacturing Processes  
Project Management (Microsoft Project)

### LIBERAL ARTS

Quantum Computation  
Language, Cognition, and Culture  
Mathematics and Reality  
Brain and Behaviour  
Cultures, Civilizations, and Ideas  
War and Democracy  
Issues In and Around Justice

## SKILLS

### PROGRAMMING

Python • C • Lisp • MATLAB • Arduino • TensorFlow • VBA

### LANGUAGES

English • Malay (STPM) • Chinese (PMR)

### INTERESTS

Meeting new people • sleep science • philosophy • fiction • video games

## AWARDS

2019 USP Senior Honour Roll  
2018 USP Honour Roll  
2016 ASEAN Undergraduate Scholarship  
2015 Top Scorer of National Chemistry Quiz  
2015 Gold Medal for Kangaroo Math Competition Malaysia  
2015 Top 95 in National Mathematics Olympiad

## EXPERIENCE

### IGLOOCOMPANY PTE LTD | ASSISTANT PRODUCT MANAGER

July 2020 - Current | Singapore

- Shipped 7 successful software updates in 2021 to support 6 new products on the igloohome app, and iglooworks app/dashboard
- Designed an automated test app with Figma for factory personnel running OQC because products were being blocked from shipping due to a lack of trained testers
- Partnered closely with SingPost to conduct an IoT sensor deployment trial to improve SingPost's letterbox failure detection
- Currently leading improvements to our testing pipeline by integrating and communicating the latest research in Practical Combinatorial Testing

### ROBERT BOSCH SEA PTE LTD | CORPORATE RESEARCH INTERN

July 2018 - Dec 2018 | Singapore

- Developed hardware for evaluating commercially available sensors (i.e. pressure/ultrasonic/TVOC/TOF sensors) using Arduino
- Conducted experiments to study sensor output from filters at different contamination levels and recommended the most promising sensing principle.

### UNIVERSITY SCHOLARS PROGRAMME | STUDENT

Aug 2016 - May 2020 | Singapore

- Implemented Grover's (1996) Quantum Search Algorithm on IBM's quantum computer
- Conducted statistical testing of the Democratic Peace Theory with a logistic regression model of war data (1885-2000)
- Collected data to study the relationship between linguistic relativity and working memory perception

### CULTURAL ACTIVITIES CLUB | SOCIAL AND WELFARE DIRECTOR

Aug 2017 - Aug 2018 | Singapore

- Directed internal projects within the Cultural Activities Club (CAC) such as CAC's Appreciation Night 2018 and CAC's Annual Retreat leading to greater bonding between CAC's 12 Sub-Clubs.
- Performer and breakdancer of CAC+US 2018/2017 (NUS CAC's largest annual music and dance concert), Infusion 2018, and Ascendance 2017
- Emcee for 9 major NUS events: NUSSU Student Life Fair 2017, USP Exchange Student Events 2017/2016, CAC Appreciation Night 2017/2018, CAC Annual Retreat 2016/2017, MSL Appreciation Night 2016/2017.

## PROJECTS

### DEEP REINFORCEMENT LEARNING FOR MAPLESS NAVIGATION | FINAL YEAR PROJECT

Aug 2019 - May 2020 | Singapore

### AUTOMATED MOBILE GANGWAY | PSA MARINE PROJECT

Aug 2019 - December 2019 | Singapore

### 2D FINITE ELEMENT SOFTWARE DESIGN | GROUP PROJECT

Jan 2019 - May 2019 | Ankara, Turkey