

# LOW KAH ONN

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## EDUCATION

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### The Hong Kong Polytechnic University

Bachelor of Engineering (Honours) Mechanical Engineering

Hung Hom, Hong Kong

Expected Graduation May 2019

- **Cumulative GPA:** 3.95 / 4.0 || **Weighted GPA:** 3.98 / 4.0

- **Honours:** Dean's Honours List 2015-16, Dean's Honours List 2016-17, HKSAR Targeted Scholarship 2016 (HKD\$ 640,000), The Most Outstanding Student Award 2018 of Mechanical Engineering Department

- **Relevant Subjects:** Thermodynamics, Fluid Mechanics, Heat and Mass Transfer, Air-conditioning for Indoor Thermal and Environmental Quality, Engine Technology

### University of New South Wales

Exchange Programme, Mechanical Engineering

Sydney, Australia

July 2017 – December 2017

- **WAM:** 78.25 / 100 || **Honours:** HKSAR Government Reaching Out Award 2017-18 (HKD\$ 10,000)

### Peking University

Globex Julmester 2016 (Summer School Programme)

Beijing, China

July 2016 – July 2016

- **WAM:** 82 / 100 || **Honours:** Globex Julmester Full Scholarship (HKD\$ 12,000)

## PROFESSIONAL EXPERIENCE

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### Final Year Project

Swarm Unmanned Aerial Vehicle (UAV) System

The Hong Kong Polytechnic University

September 2018 - Present

- Design, build and demonstrate a decentralized autonomous swarm UAV system with internal collision avoidance capability
- Research, design and code the mathematical model of a swarm UAV communication system and optimization algorithm
- Demonstrate the possible contributions of the swarm UAV system in bridge inspection

### Shell Hong Kong Limited

Engineering Assistant (Summer Intern), Repair and Maintenance team

Tsing Yi, Hong Kong

July 2018 – August 2018

- **Project Experience:** Calculated the installation heights of the safety critical equipment of 30+ storage tanks; Verified data by performing measurements on-site; Consolidated data and proposed a stock inventory minimization plan and a solution to help save operation costs over HKD\$ 100,000 and to simplify the installation process; Presented the results to supervisor
- **Operational Experience:** Learned process flows of the main plant; Localized 8 chapters (30 slides each) of Basic Terminal Engineering Course to develop competencies of newcomers; Participated in Weekly Progress Meeting for information update. Participated in Regional Engineering Staff Meeting conference call with teams in Philippines, Malaysia and Singapore
- **Analytical Experience:** Analyzed 2016-17 work order data (1500+ entries) in SAP to identify costly and frequently recurring maintenance; Performed fish bone analysis and proposed solutions to improve asset performance and prolong equipment life
- **CAD Drawing Experience:** Updated and corrected 10 Process Engineering Flow Scheme (PEFS, or commonly known as P&ID); Compared the equipment on-site with the PEFS and updated missing equipment with their corresponding symbols in the legends
- **Workplace Social Experience:** Built working relationships with and gained trust from contractors and colleagues; Communicated with contractors to convey messages and follow work progress; Coordinated with colleagues actively to deliver a project on time

### Tsun Jin High School

Laboratory Assistant

Kuala Lumpur, Malaysia

January 2015 – July 2015

- **Technical Experience:** Diluted high concentrated strong acid and alkaline solutions (above 10 mol/L) to produce low concentration solutions for laboratory classes; Mastered Laboratory Safety; Designed and prepared intriguing experiments for Science Camp
- **Leadership Experience:** Led the Laboratory Assistant team of 4; Demonstrated experiment procedures to students; Arranged the timetable of students' laboratory classes; Assisted teachers in the preparation and marking scheme for laboratory examinations
- **Stock Management Skills:** Estimated the quantity of the needed stock of chemical compounds and apparatus for laboratory classes after stocktaking and quoted prices from suppliers for replenishment

## LEADERSHIP EXPERIENCE

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### Malaysian Student Association

External Vice President

The Hong Kong Polytechnic University

August 2016 – July 2017

- Organized monthly events to strengthen the bond between members and had 25% growth of membership for the next year
- Integrated 50 participants of 5 different nationalities via organizing International Badminton Competition 2017
- Led 40 members to organize Malaysian Night 2017 that promoted Malaysian culture to 200 participants
- Obtained departmental funding of HKD\$ 12,000 from the university for organizing events

## OTHER INFORMATION

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**Language:** English (fluent), Mandarin (native), Cantonese (fluent), Malay (intermediate)

**Software:** Microsoft Office, AutoCAD, SolidWorks, Matlab, Simulink, C++, Python

**Training:** Industrial training on manufacturing tools (conducted by The Hong Kong Polytechnic University)

**Engineering-related Award:** Taylor's University (School of Engineering) CO<sub>2</sub> Car Competition 2013 (Champion)

**Interests:** Badminton (Quarter-finalists of Hong Kong Captain Cup 2016) || Basketball (Semi-finalists of One-Belt-One-Road Basketball Competition 2018) || Diabolo (Performed on stage to audiences of more than 800)