



# LOW KAH ONN

## Software Engineer



+(852) 54956585



<https://lowkahonn.github.io>



[lowkahonn0106@gmail.com](mailto:lowkahonn0106@gmail.com)



<https://github.com/lowkahonn>



<https://www.linkedin.com/in/kah-onn-low-b5836a15b>

## EDUCATION

---

SEPT 2015 - MAY 2019

The Hong Kong Polytechnic University,

Bachelor of Engineering (Honours) Mechanical Engineering with First Class Honour (GPA: 4.0)

## WORK EXPERIENCE

---

APR 2019 - PRESENT

**HKTaxi App Limited (Software Engineer)**

- Developing and maintaining cross-platform mobile application with Flutter framework
- Implementing Instant Messaging feature in both web and mobile platforms
- Integrated a GPS IoT device to record vehicles data along with their locations
- Created a taxi management website to view taxis' current locations and previous trip data

MAR 2020

**Freelancing**

- Developed a web-scraper software with Python GUI and exported data in Microsoft Excel

JUN 2018 - AUG 2018

**Shell Hong Kong Limited (Mechanical Engineering Assistant Intern)**

- Proposed a stock inventory minimization plan to save HKD\$ 100,000 operation costs
- Proposed an automation process to save installation time of safety critical equipment
- Performed fish bone analysis to improve asset performance and prolong equipment life based on 1500+ entries of work order data on SAP

## PROJECTS

---

FEB 2020

**Exam Paper Marker**

- Developed Django backend server for image processing using OpenCV library
- Github: <https://github.com/lowkahonn/Exam-Scanner>

**NOV 2019 Automated Booking System**

- Automated the badminton court booking process with Selenium
- Tried to train a neural net with captcha images to automate the final confirmation process
- Github: <https://github.com/lowkahonn/booking>

**AUG 2019 Flutter Plugin**

- Wrote a library to convert Hong Kong Grid 1980 coordinate to WGS 84 latitude and longitude
- Github: [https://github.com/lowkahonn/flutter\\_hkgrid80\\_wgs84\\_converter](https://github.com/lowkahonn/flutter_hkgrid80_wgs84_converter)

**JUL 2019 Flutter Snake Game**

- Coded snake game in Flutter framework
- Android APK: <https://drive.google.com/open?id=19Gt-AKoxIXXBhseVReIVR4abIAopPYgZ>
- Github: <https://github.com/lowkahonn/Flutter-Snake-Game>

**SEPT 2018 - MAY 2019 Swarm Unmanned Aerial Vehicle (UAV) System (Final Year Project)**

- Assembled 3 quadrotor UAVs with PX4 Autopilots and onboard computers for offboard controls
- Scripted a centralized system with Python and ROS to coordinate UAVs
- Integrated shape-forming, swarming and collision avoidance abilities into the system
- Implemented Uniform Cost Search to allocate position coordinates to UAVs
- Demonstrated the system in indoor with Vicon-tracking system
- Pioneered the research in and provided foundation of research to the department

**JAN 2019 - MAY 2019 Quadruped Robot (Academic Project)**

- Designed the mechanical structure and the walking mechanism of the robot
- Collaborated with cross-disciplinary individuals during the whole design process
- Controlled the robot via Bluetooth
- Manufactured the robot by 3D Printing Technology and Sheet Metal
- Video: <https://youtu.be/XzctvO8tCok>

**MAR 2019 Python Machine Learning Web App**

- Built a Linear Regression model to predict real value target based on categorical feature
- Github: <https://github.com/lowkahonn/Simple-Machine-Learning-Web-App>

**DEC 2018 Python Multiplayer Snake Game**

- Implemented a two-player snake game with Pygame and generated executables for Windows
- Github: <https://github.com/lowkahonn/Multiplayer-Snake-Game>

NOV 2016 - DEC 2016 **C++ Email Handler** (Academic Project)

- Developed a C++ console application integrated with login system
- Implemented email storing, deleting, sorting and sending features
- Github: <https://github.com/lowkahonn/C-Academic-Project-Email-Handler>

## SKILLS

---

### PROGRAMMING LANGUAGES

**Front End Development:** ReactJS, Flutter

**Back End Development:** Python (Django and Flask)

**Database:** MySQL, Redis

**OS environment:** Windows, Linux, macOS

**Experience & Tools:** Git, Bash, IoT

**Robotics:** ROS

### PRODUCT DESIGN

**Software:** AutoCAD, SolidWorks

**Manufacturing:** 3D Print, Sheet Metal

### LANGUAGES

**English, Chinese** (Mandarin, Cantonese), **Malay**

## AWARDS & HONOURS

---

### THE HONG KONG POLYTECHNIC UNIVERSITY

- Rexroth 4EE Scholarship 2019 (HKD\$ 12,500)
- Valedictorian of Department 2019
- Outstanding Student Award of Department 2018
- The Hong Kong & Kowloon Engineering Employers Association Limited Scholarship 2018/19 (HKD\$ 7,500)
- HKSAR Government Reaching Out Award 2017-18 (HKD\$ 10,000)
- Dean's Honours List 2015/16 & 2016/17
- HKSAR Government Targeted Scholarship 2016 (HKD\$ 640,000)
- Globex Julmester Scholarship 2016 (HKD\$ 12,000)
- Wong Tit-Shing Student Exchange Scholarship (HKD\$ 30,000)
- PolyU Outbound Exchange Funding (HKD\$ 19,000)
- Champion of Talent Quest 2016 & 2017

### TSUN JIN HIGH SCHOOL

- Ranked Top 1 nationally in Advanced Mathematics II, MICSS Unified Examination Certificate
- Ranked Top 10 nationally in Physics, MICSS Unified Examination Certificate

## LEADERSHIP

---

THE HONG KONG  
POLYTECHNIC UNIVERSITY

### **Student Mentorship**

- Gave voluntary speech to 50 students to share my learning experiences and tips on job hunting

### **External Vice President of Malaysian Student Association 2016**

- Integrated 50 participants of 5 different nationalities in a self-organized badminton competition
- Led 40 members to organize Malaysian Night to promote Malaysian culture to 200 participants
- Increased membership by 25% in the coming year
- Obtained departmental funding of HKD\$ 12,000 for organizing events