

## EDUCATION

### THE HONG KONG POLYTECHNIC UNIVERSITY

BENG IN ELECTRONIC AND  
INFORMATION ENGINEERING  
Feb 2013 - Jun 2017 (Expected)  
Hong Kong  
Cum. GPA: 3.87 / 4.0

BS IN APPLIED BIOLOGY WITH  
BIOTECHNOLOGY  
Sep 2012 - Feb 2013

UNIVERSITY OF WATERLOO  
ENGINEERING EXCHANGE PROGRAM  
Canada

## COURSEWORK

THE HONG KONG  
POLYTECHNIC UNIVERSITY  
Calculus (A+) • Linear Algebra (A) •  
Probability (A) • Physics (A+) •  
Computer Programming C++ (A) •  
Circuit Analysis (A) • Digital Signal  
Processing (A) • Materials Science  
and Engineering (A)

### COURSERA

Algorithms: Design and Analysis  
Control of Mobile Robots

### MIT OPENCOURSEWARE

Engineering Dynamics  
Introduction to Robotics

## SKILLS

### PROGRAMMING

Over 5000 lines:

C++ • JavaScript • CSS • Python

Over 1000 lines:

Java • PHP • C • Matlab •  $\text{\LaTeX}$

Familiar:

Arduino • Hadoop • OpenCV • MySQL  
Matlab Simulink • Android

### HARDWARE

Circuit design • PCB fabrication

### SOFTWARE

AutoCAD • Solidworks

## LANGUAGES

Chinese: Mandarin/Cantonese • English  
• Japanese

## WORK EXPERIENCE

### MICROSOFT | SOFTWARE ENGINEERING INTERNSHIP

July 2015 - Dec 2015 | Beijing, China

- Worked in Cloud and Enterprise division, Platform and Tools group
- Developed distributed web crawling system with Nutch and Scrapy
- Integrated crawling system with Hadoop and HBase
- Developed Android Bluetooth application and conducted backend programming with Python, interacted with MongoDB

### RAVENTECH | SOFTWARE ENGINEERING INTERNSHIP

Jan 2016 - Mar 2016 | Beijing, China

- Worked with the Web Development team and developed the official website: <http://www.raventech.com>
- Frontend development with ejs, CSS3, javascript, and backend development with Node.js, with Express framework
- Implemented svg web animations in RavenTech Labs

## RESEARCH EXPERIENCE

### CARNEGIE MELLON UNIVERSITY | SUMMER RESEARCH

Robotics Institute Summer Scholar | Supervisor: Prof. Howie Choset

June 2016 - Aug 2016 | Pittsburgh, PA

- Worked with Chaohui Gong and Prof. Howie Choset at the Biorobotics Lab
- Built Visual Odometry system for indoor localization
- Implemented the visual SLAM system based on ORB-SLAM, taking input from Real-earth LIDAR system as map initialization
- Built multi-camera simulation environment in Gazebo

### THE HONG KONG POLYTECHNIC UNIVERSITY | FINAL YEAR PROJECT

Supervisor: Prof. Chao Lu & Plugtech Precision Systems Ltd.

Sep 2016 - May 2017 (Expected) | Hong Kong

- Best 50 Final Year Project in Hong Kong (20,000 HKD Funding)
- Worked with Prof. Chao Lu and Plugtech Precision Systems Ltd. in developing a Book Returning Robot (named Bookle) in library environment
- Designed to scan books, localize itself in the library and put the returned book back to its original place
- Responsible for all software implementation including: LIDAR localization, Gazebo simulation, path planning, and object avoidance

## AWARDS

- 2015 HKSAR Government Scholarship (80,000 HKD / year) 2013, 2014, 2015
- 2015 Best GPA Award for 2014, 2015 (3 / 80)
- 2013 The Professional Validation Council of Hong Kong Industries Scholarship
- 2013 Hall Residences with Outstanding Contribution (3 of 250)
- 2011 First Award in National Olympiad in Mathematics in Provinces (Top 0.1%)

## ACTIVITIES

- 2016 MIT Entrepreneurship and Maker Skills Integrator
- 2016 Hong Kong X Venture Capital Campus Ambassador
- 2014 Organizing Committee of Enlighten Project broke Guinness World Record for the most electricity generated in 24 hours by cycling
- 2014 Voluntary Services in Yogyakarta, Indonesia
- 2013 Publication Secretary of Chinese Mainland Students' Association, HKPUSU