

# Liew Zhao Wei

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## EDUCATION

### Hwa Chong Institution (2013 - 2018)

Studied Computing, Mathematics, Physics, Economics, General Paper, and Project Work.

## WORK EXPERIENCE

### Intern at Tinkertanker (Jan 2019 - Mar 2019)

- Worked on redesigning the Get Hacking website with HTML, CSS, and Ruby on Rails
- Wrote UI tests and fixed bugs for the Get Hacking Android app, improving developer productivity
- Documented my learnings with a technical blog post on UI testing for Android

## ACHIEVEMENTS & AWARDS

### Distinguished Achievement Award

*2018 National Chinese Mobile App Development by Students for Students Competition (Singapore Centre for Chinese Language)*

- Built a Unity mobile game to aid and engage primary school students in learning Chinese
- Guided my team through the planning stages of the app
- Led 2 inexperienced programmers through the initial architecture design phase
- Taught team members project management tools like Git, Slack, and Trello
- Built the data/state management and character navigation systems

### Special Award

*SkillsFuture Singapore Hackathon 2018 (UP Singapore)*

- Built an on-demand online real-time tutoring platform (Node.js, JS, HTML, CSS)
- Incentivises tutors with 'karma' or monetary gains
- Built the real-time messaging service for both the client and the server

### 2nd Place & Silver Award (pre-university)

*Cyber Defenders Discovery Camp 2017 & 2018 (DSTA)*

- Participated in a 2-day wargame contest, pitting my team against dozens of other teams
- Secured my team server with a firewall using nftables
- Discovered and exploited vulnerabilities in a server set up by the organisers
- Utilised various network penetration testing tools such as nmap, netstat, telnet, ssh, Gobuster, and Wireshark

### Grand Prize

*Google Code-in 2017 (Google)*

- Contributed to open-source organisations like JBoss, Wikimedia, and MovingBlocks
- Wrote features and fixed bugs with Android, Node.js, and Python
- Documented projects with set-up instructions, and code architecture and API information
- Wrote a write-up and made a video for publicity

### Merit Award

*Singapore Science and Engineering Fair 2017 (A\*STAR, MOE, Science Centre Singapore)*

- Designed a model networking algorithm with ant colony optimisation and load balancing
- Built visualisation and benchmarking tools for monitoring network performance with Java Swing

## PROJECTS

### **LineageOS/CyanogenMod** - *contributor to a third-party Android distribution*

- Maintained ports for devices like the Xiaomi Redmi 3S and the Samsung Galaxy S4
- Worked on custom features like the touchscreen gesture management system
- Forward ported various features from older releases to newer releases

### **Into the Light** - *community involvement w/ Singapore Association for the Visually Handicapped*

- Worked on a text-to-speech app for the visually handicapped, applying accessibility techniques

### **Optical Localisation of Robots** - *a team project for NUS Hack&Roll 2018*

- Optically localised a sensor-less robot in a robotics play field using a camera with a bird's-eye view and a server that updates the robot of its position (Python, Arduino, HTML, JS, Node.js)

### **GovTech GeekOut Bootcamp 2018**

- Building and programmed an autonomous robot car that navigates a race circuit with obstacles

## SKILLS

HTML, CSS, JavaScript, Node.js, Android (Java, Kotlin), Arduino, Python, Ruby on Rails, C++