



# Ying Yee Wong (Rae)

Computer Science student at Carnegie Mellon

Passionate about exploring the different fields of CS including machine learning, cyber security and web applications, I believe in creating smart solutions to solve real world problems.

✉ yingyee0111@gmail.com

☎ +65 90880197

📍 Singapore

🌐 [linkedin.com/in/yingyeewongrae](https://www.linkedin.com/in/yingyeewongrae)

## EDUCATION

### B.S. in Computer Science

Carnegie Mellon University

08/2020 - Present

Pittsburgh, PA, USA

### Singapore-Cambridge GCE A-Levels

Hwa Chong Institution

01/2018 - 12/2019

Singapore

Courses and Activities

- Gifted and Talented Education Program (Physics)
- H2 Computing (top in cohort), Mathematics, Physics, Economics, H3 Mathematics
- Co-Chairperson of the 11th International Science Youth Forum (hosted nobel laureates and field medalists)
- President of Research Council (~200 members)

## WORK EXPERIENCE

### Web Development Intern

Insignia Ventures Partners

08/2020 - Present

Singapore

An early stage technology venture fund dedicated to growing the most influential companies in Southeast Asia

Achievements/Tasks

- Developed a venture capital simulator to calculate shares ownership based on funding raised
- Incorporating it to Insignia's website to enhance workflow

### Mobile Security Intern

Centre for Strategic Infocomm Technologies (CSIT)

03/2020 - 05/2020

Singapore

Leading agency that conducts applied research and builds products to meet national security needs

Achievements/Tasks

- Reverse engineered banking apps using tools such as Frida and Ghidra
- Researched on low level computation and crafted thumb assembly code to perform injected native functions

### Internet of Things Security Intern

Government Technology Agency (Advanced Cyber Attack Simulation)

01/2020 - 03/2020

Singapore

A statutory board under the Prime Minister's Office that uses technology to improve the lives of everyday Singaporeans

Achievements/Tasks

- Researched on Bluetooth Low Energy for the development and pen testing of TraceTogether, a contact tracing app rolled out in the nation, downloaded by over 1 million users
- Performed pen testing on various Bluetooth personal devices and drafted a checklist for future standardization

### Research Attachment

A\*STAR - Agency for Science, Technology and Research

01/2016 - 01/2019

Singapore

Achievements/Tasks

- Applied semi-supervised machine learning and developed an Intrusion Detection System for Singapore's critical transport infrastructure
- Developed a GUI for configuration of Linux iptables firewall, taking into account proprietary needs of the Modbus protocol

## VOLUNTEER EXPERIENCE

### Volunteer Web Developer

Advisory Singapore

08/2020 - Present

Tasks/Achievements

- Developing a new website using React to replace the current WordPress page

### Teaching Assistant

Code in the Community

01/2019 - 04/2019

Tasks/Achievements

- Taught scratch and python to less privileged children, each over a course of 10 sessions

## ACHIEVEMENTS

Hwa Chong All-Round Excellence Award

*Recognises 10-15 top students of the graduating cohort*

Championship and Best Defender, Cyber Defenders  
Discovery Camp (2019)

*National capture the flag competition*

Joint First in Nationals. International Mathematical  
Modelling Challenge (IMMC 2018)

Bronze Award, Singapore Science and Engineering Fair  
(2018 & 2019)

*National competition for student researchers*

## TECHNICAL SKILLS

**Web**                      html, css, js, react, nodejs, MERN stack

**Languages**                      python, c++, js

**Security**                      linux OS, frida, ghidra, kali tools

**ML**                                  MatLab, LaTeX