

HONG WEI YANG

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EDUCATION

National University of Singapore (NUS)

Aug 2018 - Present

- Bachelor of Engineering (Computer Engineering Honors) Year 2
- Current Cumulative Average Point (CAP): 4.29/5
- Expected Date of Graduation: May 2022

WORK EXPERIENCE

IT Intern, NUS Information Technology, Singapore
Dec 2019 - Present

- Successfully created a wireless sensor prototype via a 3-tier architecture consisting of a client-logic-data tier using raspberry pi.
- Planned the design of the database in MySQL for data to be stored.
- Developed and managed the front-end web dashboard showing data statistics pulled from the database.

Open Electricity Act (OEM) Part-time Promoter, Singapore

Jul 2018 - Jul 2019

- Met daily sales target and provided customers with information regarding open electricity act.
- Managed booths and roadshows island-wide, verifying and signing up potential customers.

HR Assistant(contract), Neovia 3PL, Singapore
Nov 2017 - Apr 2018

- Organized warehouse employee's leave record in Microsoft Excel and Microsoft Access.
- Managed the recruitment of material handlers by conducting interviews and tests for the applicants.

EXTRA-CURRICULAR ACTIVITIES

Jurong West Symphonic Band

- Played as a saxophone member.
- Conducted sectional practices for section members as a section leader.
- Clinched silver award at the Singapore Youth Festivals and Singapore Band Festivals as a participating member.

VOLUNTEER EXPERIENCE

- Led the effort to re-furnish homes of less-fortunate Singaporeans staying in the East side, together with the 39SCE combat engineers.
- Created elderly-friendly exercise routines, provided meals and played games together with the elderly staying in St Joseph's Home.

Projects involved

Search and rescue robot (miniature version, dimension ~30cm x 60cm)

Created a robot to navigate a maze wirelessly and without looking at maze, achieved by tunneling into robot's remote terminal using SSH and making sure connection is secure with TCP/IP encryption. The system uses robot operating system under Linux and maze map was generated by robot scanner remotely and sent to user-control using SLAM algorithm.

Social media app integrated with fitness elements in Android

Designed and developed an android application via android studio in Java, while backend was built with in MySQL and PHP. Learnt about basic software development, API calls and hacking together prototype features, debugging and user testing, as well as version control with Git.

Crowd density detector using object recognition and ReactJS dashboard Hackathon

Students on the campus have difficulties finding seats in crowded study areas. Hence, we developed a web app that allows users to know beforehand which study areas are crowded and which are available via image recognition. The prototype was developed using a raspberry pi and pi cam, with YOLO (you only look once) object recognition python library and pre-trained dataset. After which the information would be streamed directly onto a web app made with ReactJS where students can access.

Interest

- Powerlifting and working out. It helps me to relax in times of stress and keeps me grounded and in check.
- Learning new tech stacks and using it to build awesome things.
- Meditation for calmness and to improve creativity which is vital for software/hardware development.