

Cervon Wong

Year 5 student at NUS High School of Math and Science

Majors: Math, Biology, Chemistry, Physics

Honours: Computer Engineering

CAP: 4.8 / 5.0 (2022 Sem 1)

Mail: hello@cervonwong.com

Web: cervonwong.com

linkedin.com/in/cervonwong/

Projects

Web app that enabled trainees with mild intellectual disability to learn work skills independently (Jul 2021 – Jan 2022)

- Worked directly with instructors to learn about issues that trainees and instructors face.
- Ideated with two teammates to ensure product features accurately solve trainees' issues.
- Designed accessibility features to make web app easier and more intuitive to use.
 - I chose to use images and included buttons to listen to UI text to aid illiterate trainees.
- Architected back-end services model and coded front-end app using Flutter from scratch.
- Distributed app onto trainees' iPads.
- Hosted app live on the web for public demo (<https://mint-def9e.web.app/#demo>).

Machine learning model that monitors foreign ships near Singapore (Jun 2021)

- Optimised convolutional neural network layers to improve recognition accuracy.

Algorithmic flashcard scheduling app for learning retention (Jan 2019 – Jun 2021)

- Connected Android app to SQL database to keep track of users' learning data.
- Implemented AI that processes users' learning data to optimise learning schedule.

Awards & Achievements

NUS High Commendation Award for Service 2022 (Mar 2022)

FINALIST – Tech for Good Innovation Challenge 2021 (Nov 2021)

- Entered the finals of a national university-level six-month engineering contest.
- Teamed up with two students, proposed an app solution to tackle a problem statement.
- Implemented and presented minimum viable product of the app at the festival.

CHAMPION – YDSP Science and Tech Camp (AI using Satellite Images) (Jun 2021)

- Coded and presented a machine learning model to bolster national security in a team.
- Represented NUS High School and emerged champion against 13 other IP schools.

Best in Computer Studies – NUS High School Subject Book Prize (Mar 2019)

Technical Skills

Front-end/Back-end: Flutter, Java, HTML/CSS/JS/TS, Firebase Cloud Firestore, SQL

Machine Learning: Python, NumPy, Pandas, TensorFlow

UI/UX Design: Figma, Mobile design, Web design, Accessibility, Responsiveness

Tools & Environments: Git and GitHub, VSCode, IntelliJ, Jupyter

Courses & Workshops

AWS DeepRacer League Workshop (Oct 2021)

- Learnt reinforcement learning techniques.
- Trained a reinforcement learning model to drive a 1/18th scale autonomous race car.

BrainHack 2021 XRperience Hackathon (Jun 2021)

- Learnt how to design and develop virtual reality experiences.

Introduction to Flutter Development Using Dart Course (Nov 2020)

- Learnt how to code cross-platform apps for Android, iOS, Web, Windows, etc.