

Ng Ho Chi

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Education

A LEVELS [2017-2018] | HWA CHONG INSTITUTION

- Hwa Chong Diploma with Distinction
- Part of Hwa Chong's Science and Math Talent Programme
- 88.75 RP

BACHELOR OF ENGINEERING (COMPUTER SCIENCE) [2021-2025] (EXPECTED) | NTU

- CN Yang Scholarship – only offered to 31 students in cohort
- Current CGPA: 4.86

Work Experience

DATA ANALYST | CSOG MOH [DEC 2020-APR 2021]

- Consolidate and process information from relevant sources into figures and charts for regular press release.
- Write and debug code to improve data processing.
- Implemented new workflow to improve dissemination of information between MOH teams.
- Assisted in the revamp of an old process used to consolidate information from hospitals.

FULL STACK DEVELOPER | LABCI ASIA PTE. LTD [SEPT 2021-PRESENT]

- Develop UIs to demo features for React stock applications.
- Wrote algorithms to convert financial data into more useful information.
- Design and maintain MongoDB databases to store processed data, as well as created APIs for accessing stored data.

Achievements

ROBOCUP INTERNATIONAL RESCUE LINE – SINGAPORE OPEN CHAMPIONS [APR 2018]

- Built a Lego line tracking robot with ball picking and sorting capabilities which won Singapore Open.
- Restructured bot with Arduino boards, allowing more design flexibility for Robocup International.
- Responsible for programming, circuitry design and soldering.

NUS DATA ANALYTICS COMPETITION – CHAMPIONS [FEB 2022]

- NUS hosted Data Analytics competition in partnership with Grab featuring their Posisi Dataset.
- Worked with geospatial dataset featuring real-life transport data in Singapore and Jakarta.
- Analyzed the dataset to come up with plausible solutions to tackle the problem of late arrivals.

HTX INVESTIGATORS CHALLENGE – 4TH PLACE [DEC 2021]

- Capture the Flag competition to find vulnerabilities and exploits in web apps, scripts, networks and many more.
- Mostly focused on Reverse Engineering, Binary Exploitation and Web exploits.

Personal Projects

ALGORITHM VISUALISER | [[HTTPS://VIS.NGHOCHL.XYZ/](https://vis.nghochl.xyz/)]

- Web application built with React (create-react-app) to allow the visualization of simple sorting algorithms and a pathfinding algorithm.
- Deployed onto Netlify, and built using the Material-UI library.

DATABASE VISUALISER | [[HTTPS://DBVIS.VERCEL.APP/](https://dbvis.vercel.app/)]

- Web application built with React using the Next.JS framework to help with the visualization of relational databases (such as MySQL and PostgreSQL).
- Has basic features necessary and documentation to help with the use of the web app.
- Built with the Material-UI library, and deployed onto Vercel.

Co-Curricular Activities

ROBOTICS AND INFOCOMM CLUB [2017-2018]

- Robotics division.
- Participated in robotics competitions such as RoboCup and National Robotics Competition. (NRC)
- Participated in some Infocomm division activities such as Hackathons and CTFs.

MACHINE LEARNING AND DATA ANALYTICS CLUB [2021-PRESENT]

- Carry out workshops on machine-learning or artificial intelligence related topics for NTU students and the general public.

Tech Stack

- **Languages:** JavaScript, Python, C, Stata
- **Frameworks:** Node.js, React, Vue, Flutter
- **Databases:** MongoDB, MySQL, PostgreSQL
- **ML Libraries:** OpenCV, TensorFlow
- **Hardware:** Arduino, Raspberry Pi
- **Others:** Git, Microsoft Office, Linux