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.
- Testing and deploying of applications using AWS docker containers.

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.NGHOCHI.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/]

- 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.

WORD-TRIS | [HTTPS://WORD-TRIS.NETLIFY.APP/]

- Web game built with React, Express and Socket.io for the iNTUition 2022 hackathon.
- Minimal with no external UI libraries or functions.
- Deployed onto Netlify with a Heroku backend.

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: React, Vue, Svelte, React Native, Flutter
- **Databases**: MongoDB, MySQL, PostgreSQL
- ML Libraries: OpenCV, TensorFlow, PyTorch
- Others: Git, Microsoft Office, Linux, Azure, Firebase