Ng Ho Chi nghochi.xyz

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# **EDUCATION**

**Singapore** Nanyang Technological University Aug 2021 - Expected May 2025

• BE in Computer Science Current CGPA: 4.91/5.00

Under the CN Yang Scholarship, awarded to only 31 recipients within the batch

Dean's List for AY21/22

## **EMPLOYMENT**

# **Full Stack Software Engineer**

## **LabCI Limited**

Sept 2021 – Present

- Implemented algorithms for technical analysis of financial datasets in Python to be executed periodically, storing the resultant data in a MongoDB database for use by other projects.
- Designed and maintained an Express API that integrates data sources from multiple projects, and created mobile and web applications for demonstration purposes. Deployed to production, used by external companies like HSBC.
- Working on a React web application with modular widgets that queries real time data from financial data sources.

# **Data Analyst**

# Ministry of Health, Singapore

Dec 2020 - Apr 2021

- Consolidated and processed Covid-19 information from relevant sources into figures and charts for press release.
- Improved and maintained codebase in Python and Stata to improve data processing ability for documents passed between the different divisions, greatly reducing the time needed to manually process them.

#### **PROJECTS**

#### **Home Server**

- Repurposed an old PC into a personal home server running Manjaro Linux.
- Set up Docker containers that are selectively exposed to the web using a tunnelling reverse proxy service through a VPS, allowing for easy monitoring and maintenance of system and container health.
- Currently self-hosting a personal Git service, file storage solution as well as multiple web applications.

# **Web Applications**

- Algorithm Visualizer A React web application for the visualization of some sorting algorithms and a simple pathfinding algorithm. Uses the Material UI library.
- WordTris A 2-player real-time competitive web game built with React, Express and Socket.io in a day for the iNTUition 2022 hackathon.

## **ADDITIONAL EXPERIENCE AND AWARDS**

- National Champions, RoboCup Rescue Line (2018): Programmed a line-tracking robot in C++ (Arduino) with ball capturing and sorting capabilities for an obstacle-course-like competition. Represented Singapore in RoboCup Montreal for the Rescue Line Category.
- Champions, NUS Data Analytics Competition (2022): Analyzed geospatial datasets using Python featuring transport data in Singapore and Jakarta provided by Grab to formulate solutions to tackle the problem of late arrivals.
- 1st Runner Up, TezAsia Hackathon (2022): Developed an NFT Marketplace with React and Express for users to mint and view 3D panoramic NFTs on the Tezos blockchain. SmartPy was used for building Smart Contracts for minting.

## **TECH STACK**

- Languages: Javascript/HTML/CSS, Python, C++, SQL, Bash
- Frameworks and Libraries: React, Vue, React Native, Flutter, Node.js, Express.js
- Tools: Git, Linux, Docker, Figma
- Others: TensorFlow, PyTorch, OpenCV, SmartPy