Ng Ho Chi

GitHub: nghochi123 LinkedIn: Ng Ho Chi

EDUCATION

Singapore Nanyang Technological University

Aug 2021 - Expected May 2025

• BE in Computer Science - CN Yang Scholarship

Current CGPA: 4.91/5.00

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 and 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