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# Ng Ho Chi
**nghochi.xyz**

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## EDUCATION

| Singapore | Nanyang Technological University | Aug 2021 - Expected May 2025 |
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- BE in Computer Science - CN Yang Scholarship                         Current CGPA: 4.91/5.00

## EMPLOYMENT

| Full Stack Software Engineer | LabCI Limited | Sept 2021 – Present |
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- Implemented algorithms for technical analysis in **Python** to be executed periodically, storing the resultant data in a **MongoDB** database.
- 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.
- Currently working on a modular **React** web application that queries data from real-time data sources.

| Data Analyst | Ministry of Health, Singapore | Dec 2020 – Apr 2021 |
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- Consolidated and processed Covid-19 information from relevant sources into figures and charts for press release.
- Wrote code in **Python** and **Stata** to improve data processing ability for documents passed between the different divisions.

## 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 the monitoring and maintenance of system and container health through a Prometheus powered Grafana dashboard as well as the Portainer container management tool.
- Currently self-hosting a personal Git service, file storage solution as well as multiple web apps.

**Web Applications**

- **Algorithm Visualizer** – A **React** web application to allow 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):** Built a line-tracking robot with ball capturing and sorting capabilities for an obstacle-course-like competition. Represented Singapore in RoboCup Montreal.
- **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