

Tan Hiok Kuek

Computer Science Student

[Mail](#) | [Linkedin](#) | [Github](#)

EDUCATION

National University of Singapore

Aug 2024 - May 2027

Bachelor of Computing in Computer Science (Cumulative GPA 4.64)

WORK EXPERIENCE

Software Engineering Intern – NUS-NCS Cybersecurity Lab

Aug 2024 – Aug 2025

- Designed and deployed a scalable **URL Phishing Detection API** on **AWS**, utilizing **EC2**, **Auto Scaling Groups**, **Application Load Balancer**, and **Route 53**; adopted by over **10,000 users**.
- Co-authored a research paper on phishing detection, accepted at the **World Wide Web Conference 2025**.
- Migrated AWS infrastructure to **Terraform**, enhancing code maintainability and reducing deployment time by **30%**.
- Developed interactive dashboards with **Next.js** for algorithm visualization, leveraging **Redux**, **Tailwind CSS**, **ShadCN**, **GraphViz**, and **D3.js**.
- Engineered phishing detection algorithms using **Python** and **Scikit-learn**, achieving over **95% accuracy** on real-world datasets.

Frontend Developer Intern – Singapore Press Holdings

Nov 2023 – Feb 2024

- Contributed to the platform team during a major migration towards modern web technologies such as **React** and **AWS**.
- Developed responsive landing pages using **React** from UI/UX wireframes, deployed across **40+ publications**.
- Implemented unit tests with **Jest** and **React Testing Library**, improving code quality and reliability.
- Developed admin dashboard using **Backstage**, enabling users to submit issues and track progress.

PROJECT EXPERIENCE

Tanbucha – Next.js

May 2025

<https://tanbucha.com>

- Designed UI/UX and developed a responsive, interactive web application with TypeScript and Next.js
- Integrated with StripeAPI for secure payment processing and Emailjs for email notifications after successful purchases.
- Managed SEO to achieve over 50+ organic visitors in the first few months of launch, selling over **100 bottles**.

Home Server – OpenMediaVault

Dec 2024

- Repurposed an old laptop into a Network Attached Storage because I refuse to pay for cloud storage.
- Host dockerised applications that were exposed through port forwarding.

AWARDS

NUS Hackers Hack&Roll (1st)

SplashAwards 2023 (1st)

SUTD WhatTheHacks 2023 (1st)

CloudHacks 2023 (1st)

GroundZero 2024 (Finals)

NUS CHS Case Comp (Finals)

COURSES

CS1101S: Programing Methodology

CS2030S: Programing Methodology II

CS1231S: Discrete Structures

CS2040S: Data Structures and Algorithms

CS2100: Computer Organisation

CS2103T: Software Engineering

SKILLS & INTERESTS

Languages & Frameworks: Python · Java · JavaScript/TypeScript · Next.js · React · Flask

APIs & Tools: AWS (Certified Solution Architect) · OAuth2 · Auth0 · Microsoft Graph API · Docker · Git · Hugging Face · ECharts · D3.js

Specialties: Browser extensions · Web app development · Phishing & typosquatting detection · Data visualization

Interests: Applied AI & cybersecurity · Interactive web development · Data storytelling · Photography