

# Tan Hiok Kuek

Singaporean Software Engineer (Full Stack)

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## EDUCATION

### National University of Singapore

Aug 2024 - Jun 2028 (expected)

*Bachelor of Computing in Computer Science (Cumulative GPA 4.64)*

## WORK EXPERIENCE

### Software Engineering Intern – NUS-NCS Cybersecurity Lab

Aug 2024 – Present

- 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 web applications with Next.js for algorithm visualization, leveraging Redux, Tailwind CSS, ShadCN, GraphViz, and D3.js.
- Built a browser extension using Plasmio that functions as an email client, implementing OAuth2 authentication and integrating with the Outlook API.
- Fine-tuned a DistilBERT classifier for phishing email detection using the Hugging Face Transformers library, achieving high accuracy on real-world datasets.
- Bundled the classifier and a local LLM (via llama.cpp) using PyInstaller as a native host within the browser extension, enabling on-device detection and analysis of phishing emails.

### Frontend Engineer Intern – Singapore Press Holdings

Nov 2023 – Feb 2024

- Contributed to the platform team during a major migration from legacy systems to modern web technologies such as React and AWS.
- Developed responsive landing pages using TypeScript, React, and Tailwind CSS from UI/UX wireframes, deployed across 40+ publications.
- Implemented unit tests with Jest and React Testing Library, improving code quality and reliability.
- Designed and built REST APIs for the admin dashboard using Node.js, Express, and MongoDB, enabling users to submit issues and track progress.

## PROJECT EXPERIENCE

### AWARDS

### COURSES

### SKILLS & INTERESTS

**Development Tools:** AWS (Certified Solution Architect) · Terraform · React · Next.js · Plasmio · Spring Boot · Docker

**Languages:** TypeScript · JavaScript · HTML5 · CSS · Java · Python · SQL