

# Tan Hiok Kuek

Singaporean Software Engineer (Full Stack)

[ernest.tanhk@gmail.com](mailto:ernest.tanhk@gmail.com) | [linkedin.com/in/hiokkuek](https://linkedin.com/in/hiokkuek)

## 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 and bundled it with a local LLM as a native host to detect phishing emails directly from the extension.

**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

**FlexiDip** *June 2024 – Present*

Co-Founder

*Ann Arbor, MI*

- Co-founded startup** specializing in adjustable dipping containers, optimizing buffalo wing dining experience.
- Developed minimum viable product(MVP) capable of early-stage revenue generation.
- Received positive feedback from established brands like Buffalo Wild Wings for innovative sauce holder designs.
- Validated startup idea through market research and interview feedback as a part of Launch-X U-Michigan.

**Private Math Tutor** *Sept. 2021 – Present*

Team Captain

*Brooklyn, NY*

- Provided personalized tutoring sessions in algebra, calculus, and geometry to elementary & middle-school students
- Developed lesson plans for diverse learning styles, leading to improvements by **upwards of 1.5 letter grades**.

## Awards

**Speedo Scholastic All-American** *Aug. 2023 – Present*

- National award given to student-athletes who achieve a **national time standard** while maintaining a 3.5+ GPA.

**National Junior Honor Society** *June 2023 – Present*

- Award presented to students with outstanding achievements in academics, leadership, and community service.

## Classes

**Courses:** AP Calculus BC, AP Chemistry, AP Physics, AP World History, AP U.S. History, AP Statistics, AP Literature

## Skills & Interests

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**Skills:** Probability Theory, Web Design, Microsoft Excel, Microsoft Office

**Interests:** Photography, Creative Writing, Archery, New York Knicks