

Leong Yu Zhi Andy

Full Stack Development | DevOps | Cybersecurity

HP: +65 96446274 | Email: leongandy026@gmail.com

LinkedIn: <https://www.linkedin.com/in/andy-leong-9bb486272/> | Github: <https://github.com/timelesclock>

Internship: 9 Sept 2024 – 7 Feb 2025

Summary

Highly motivated learner aspiring to be a full stack developer with a strong interest in DevOps and Cybersecurity. Enjoys creating secure and scalable solutions and systems that solve real-world problems. Worked with a wide variety of technologies, including frontend frameworks such as React, backend technologies such as Express and Spring and cloud platforms such as AWS and Azure. Experienced in integrating security best practices into the development process to ensure application and infrastructure security. Proficient in using DevOps tools and methodologies such as continuous integration and deployment (CI/CD), containerization with Docker and infrastructure as code using Terraform.

Skills Info:

Full Stack Development

- Proficient in designing and developing full-stack web applications using modern technologies such as HTML, CSS, JavaScript, React, Node.js, and Express.js.
- Experience in working with various databases like PostgreSQL, MySQL, and MongoDB to store and retrieve data efficiently.
- Skilled in integrating frontend and backend components seamlessly, ensuring smooth user experiences and optimal performance across different devices and platforms.

DevOps

- Knowledge of DevOps principles and practices, including continuous integration and continuous deployment (CI/CD), infrastructure as code, and automated testing.
- Familiarity with cloud platforms such as AWS and Azure, utilising services like AWS Lambda, AWS S3, and Azure VM to deploy and manage applications effectively.
- Experience in using containerization technologies like Docker and orchestration tools such as Terraform to streamline application deployment and infrastructure management.

Cybersecurity

- Understanding of fundamental cybersecurity concepts, including network security, vulnerability assessment, and threat mitigation techniques.
- Participated in capture the flag (CTF) challenges and workshops, gaining hands-on experience in identifying and exploiting vulnerabilities in simulated environments.
- Knowledge of secure coding practices and the ability to identify and remediate potential security risks in application development processes.

Areas of Expertise

Front-End Development: HTML | CSS | JavaScript | React | TailwindCSS | Bootstrap | MUI | Radix UI

Backend Development: Node.js | Express.js | NextJS | Python | tRPC | TypeScript | SocketIO | Spring Boot

Cloud Computing: AWS Lambda | AWS S3 | AWS ECS | AWS EventBridge | Azure VM | Docker | Terraform

Database Management: PostgreSQL | MySQL | MongoDB | MS SQL

Design: Figma

DevOps: Git | Nginx

Projects

PracticeMe

May 2023 - Current

Project Link: <https://socpracticeme.vercel.app/>

- Co-Developed with a group of students to create a full stack gamified website fork of a command line tool aimed at helping SP students to enhance their Javascript skills.
- Utilised the NextJS framework, with PusherJs as a Websocket service and MongoDB as the database and Sanity CMS to push announcements more efficiently.
- Currently maintaining the project for future batches to be used in their Fundamentals of Programming module.

Project INC

Sep 2023 - Current

- Worked with 11 other students using the agile scrum methodology to deliver a full-stack digitalised solution for Institute of Management Consultants (Singapore) (IMCS) that will serve up to 500 users.
- Utilised the T3 stack, consisting of NextJS, tRPC, Prisma, TailwindCSS and Typescript while deploying on the AWS cloud using Docker and Terraform.

SST Whiteboard

Nov 2023 - Dec 2023

Project Link: <https://whiteboard.timeles.dev>

Github Link: <https://github.com/TimelesClock/SST-Whiteboard>

- Side project in creating a multi-user whiteboard tool for Project INC with SST as the IAC (Infrastructure as code) to deploy into AWS using open-next.
- Utilised NextJS as the basic frontend, the TLDraw library for the whiteboard and Socket.io as the websocket server.

T3 Flow

Oct 2023 - Nov 2023

Github Link: <https://github.com/TimelesClock/t3-flow>

- Side project with another student to create a multi-user collaboration flowchart tool using the React-flow library.
- Utilised the T3 Stack consisting of NextJS, tRPC, Prisma and Typescript.

Project Swifty

May 2023 - Aug 2023

Project Link: <https://swifty.timeles.dev>

- Worked with 3 other students for a full stack development assignment.
- Utilised the NextJS framework to create a real-time chat application with a Socket.io backend server and AWS S3 for multimedia storage.

Academic Qualifications

Singapore Polytechnic

Apr 2022 - Apr 2025

Diploma in Information Technology

Achieved Distinction In: Fundamentals of Programming, Fundamentals of Computing, Backend Development

Current CGPA: 3.70

Anglo-Chinese School (Barker Road)

Jan 2019 – Dec 2021

GCSE 'O' Level

L1R5: 13 | L1R4: 9

Awards & Achievements

Top in Cohort for 'O' level Computing

2021

Sentinel Program SHIELD Award

2024

6th place in Lag and Crash CTF

2024

Certificates

Hackerrank SQL Basic	2023
Hackerrank SQL Intermediate	2023
Hackerrank Python Basic	2023
Hackerrank Javascript Basic	2023
Sentinel Programme Cyber Data Analysis	2023
Sentinel Programme Network Forensics	2023
Sentinel Programme Malware Analysis	2023
Sentinel Programme Cyber Threat Intelligence	2023

Co-Curricular Activities

SEED Student Interest Group – Singapore Polytechnic Project Manager	May 2022 - Current
<ul style="list-style-type: none">• Involved in organising workshops and competitions for students' enrichment in the computing sector.• Led administrative efforts for events and workshops, ensuring seamless execution of the planned activities.	
Gryphons Student Interest Group – Singapore Polytechnic Member	May 2023 - Apr 2024
<ul style="list-style-type: none">• Involved in creating CTF (Capture the flag) challenges such as Gryphons CTF 2023.	
SP Table Tennis – Singapore Polytechnic Captain (2023 - 2024) Vice President (2024 - Current)	Apr 2023 - Current
<ul style="list-style-type: none">• Successfully worked with and led the team to win the inter-school championship (PoLITE) for two consecutive years.	
ACSBR Table Tennis – Anglo-Chinese School (Barker Road) Captain	Feb 2019 - Oct 2021
<ul style="list-style-type: none">• Successfully led the team to achieve top 3 in the Inter-school zonals competition for 2 years.• Implemented a basic physical training program for the members during the Covid-19 period.	