

Tan Khang Hou

BACHELOR OF COMPUTER SCIENCE · NATIONAL UNIVERSITY OF SINGAPORE

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Work Experience

Computing for Voluntary Welfare Organisations

National University of Singapore

FULL-STACK DEVELOPER

May 2023 - Aug 2023

- Successfully migrated a complex Case Management System (CMS) consisting of 110,000 lines of code from Ruby on Rails to Golang. This migration led to enhanced maintainability and a significant boost in application performance.
- Proficiently utilized Git for code management, employing strategies industry-standard practices ensure code quality and minimize bugs.
- Excelled in a team environment, fostering a cooperative atmosphere by actively participating in group dynamics. Demonstrated open communication and willingness to both seek assistance and provide support when needed.
- Designed the database schema for dynamic forms, similar to Google Forms, in PostgreSQL, removing the need for hardcoded forms within the codebase.

Transliner Pte. Ltd

Singapore

FULL-STACK WEB DEVELOPER

Mar 2020 - Aug 2020

- Migrated the company's legacy enterprise resource planning (ERP) system from ASP.NET WebForms to ASP.NET Core, improving performance and efficiency.
- Redesigned the company's former Wix site with Angular, resulting in a more user-friendly and dynamic web presence.
- Spearheaded development of the mobile iteration of the company's ERP system.

Centre for Strategic Infocomm Technologies (CSIT)

Singapore

SOFTWARE DEVELOPER INTERN

Oct 2019 - Feb 2020

- Created a drag-and-drop e-form builder, empowering companies to easily design and collect survey data.
- Built custom modules to optimize feedback collection and analysis, streamlining operations and driving better results.
- Worked in a team and applied SCRUM principles and agile frameworks to deliver high-quality results in a fast-paced, deadline-driven environment.

Education

National University of Singapore

Singapore

BACHELOR OF COMPUTER SCIENCE

Aug 2022 - Present

- GPA: 4.69/5.0
- Acquired a strong foundation in computer science concepts and programming paradigms such as Monads.

Singapore Polytechnic

Singapore

DIPLOMA IN INFORMATION TECHNOLOGY WITH MERIT

Apr 2017 - May 2020

- GPA: 3.96/4.0
- Acquired a solid understanding of various IT-related concepts and technologies, including full-stack web development with React and C#, database management, data analysis with Python, and mobile application development with Android Studio.
- Recipient of the Accenture Technology Prize.

Projects

E-Commerce Site

orthogait.com.sg

FULL-STACK DEVELOPER

Jul 2022 - Present

- Enhanced user experience (UX) and achieved superior search engine optimisation (SEO) by leveraging insights from Google Analytics and Google Search Console.
- Conceptualised and executed a headless E-Commerce platform, driving higher customer sales while effectively reducing operational costs.
- Successfully integrated product stock validation, third-party content management system, and delivery services, substantially elevating company productivity and streamlining operations.
- Collaborated closely with the client throughout the project life-cycle to gather project requirements, refine design elements, and implement functionality to meet business needs.

Eye Want to Rest

Eye Want to Rest

DEVELOPER

May 2022 - Sep 2022

- Successfully launched Eye Want to Rest, a user-friendly application that aid individuals in maintaining optimal eye health, on both the App Store and Google Play Store.
- Developed the application in React Native, with simplicity and ease of use in mind.

GoLunch

Singapore Polytechnic

GROUP LEADER

Mar 2019 - Aug 2019

- GoLunch is a progressive web app (PWA) that tracks users' distances travelled and exchanges them for discounts and incentives at select restaurants.
- Spearheaded the project as the group leader, overseeing its design and development and ensuring direction within the team.
- Leveraged geospatial and blockchain (web3) technologies to ensure the accuracy and authenticity of the rewards accumulated.

Inventory Management System

Integratif Pte Ltd

FULL-STACK DEVELOPER

Aug 2018 - Jan 2019

- Architected a comprehensive inventory management system website with React and ASP.NET, providing a centralised platform for the company to manage and store inventory stock.
- Conceived and crafted a database architecture from the ground up, utilizing SQL Server to map the relationships between various entities within the company and provide a solid foundation for data management.

Extracurricular Activities

Developer Students' Club

National University of Singapore

HEAD OF TECHNOLOGY

Jul 2023 - Present

- Sourced a non-profit organisation willing to work with us, and proposed a solution to help tackle their pain points.
- Interviewed and selected candidates who were both passionate and capable in their work, aiming to foster an inclusive and warm environment within the group.

Freshman Finale Camp

National University of Singapore

ORIENTATION GROUP LEADER

Aug 2023

- Managed a group of 11 freshmen, keeping their spirits up and getting them to warm up to one another.
- In charge of the planning of the camp's finale, and planned activities with two other committee members.

Gaming Buddy

Bukit Batok Care Home

VOLUNTEER

Feb 2023 - May 2023

- Visited the nursing home on a weekly basis to befriend the elderly through board games.
- Acted as a game master in a group of up to 5 elderly people at once and ensured that everyone had the chance to enjoy themselves.

NUS Hack&Roll 2023

National University of Singapore

HACKER

Jan 2023

- Worked with a team of five to ideate and prototype a gamification platform for musical instrument practice.
- Conducted extensive research on signal processing algorithms to precisely evaluate accuracy and rhythm of recordings.
- Demonstrated the ability to work well under pressure with others to deliver a functioning application.

TeachSG @ Filos Community Services

Bedok

TUTOR

Aug 2022 - Dec 2022

- Taught a secondary school student living with high-functioning autism in English.
- Developed and administered weekly quizzes, assigned readings, and devised highly-interactive assignments.
- Fostered a supportive learning environment by encouraging active participation and inquisitive behaviour, utilising a variety of techniques to ignite his passion for speaking and asking questions.

KakiLearn @ Singapore Children's Society

Yishun

TUTOR

Aug 2022 - Dec 2022

- Tutored children from underprivileged backgrounds in primary-school level English and Maths.
- Demonstrated a strong commitment to social responsibility and community service, working with others to make a positive impact in the lives of underprivileged children.

Virtual Python Telegram Workshop

Siglap South Community Centre

ORGANISER

Dec 2021

- Co-facilitated a 2-day virtual coding workshop for beginners, imparting the skills and knowledge needed to build a Chatbot on Telegram Python.
- Delivered an engaging and interactive virtual class to a group of students via Zoom, guiding them through lesson materials and ensuring understanding and comprehension.
- Created compelling advertising materials and executed an effective marketing campaign.

Skills

Programming	C# · Java · Database Architecture & Management · web3.js & Solidity · three.js · Keras · Tensorflow ·
Full-Stack Web Development	Next.js · React · React Native · Node.js · Express.js · Spring Boot · Angular
Others	Figma · Photoshop · Adobe XD · Davinci Resolve · Excel · Powerpoint · Word
Interests	Writing · Videography · Board Games · Coding · Music · Productivity