






CUI SHEN YI

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Hi! I'm a passionate and inquisitive Computer Science Undergraduate with an international background that spans across the world.

EDUCATION

NATIONAL UNIVERSITY OF SINGAPORE (SECOND YEAR)

Bachelor of Computing (Honors) in Computer Science

AUG 2021 - MAY 2025

Algorithms & Data Structures (Java) • Software Engineering (Java) • Database Systems (SQL) • System Design and Object Oriented Programming (Java) • Database Systems (SQL) • Computer Networks

UNIVERSITY OF CALIFORNIA SAN DIEGO (EXCHANGE)

Bachelor of Computing (Honors) in Computer Science

SEP 2023 - DEC 2023

EXPERIENCE

FRONTEND ENGINEERING INTERN

Datature (SG)

Jan 23 - Present

Datature is a company that builds no-code solutions to annotate, train, visualise, and deploy computer vision models

NextJS • React • BlueprintJs • TypeScript

- Created an interactive node-based UI to allow users to design customisable access control flow with React-Flow
- Spearheaded the migration and implementation of a new Authentication System on Auth0
- Installed CDP code with Segment, Mixpanel and Sentry to accurately track activity for better product insights

FULLSTACK ENGINEERING INTERN

Computing for Voluntary Welfare Organisations (SG)

May 22 - Aug 22

CVWO is an organisation that builds technology infrastructure for voluntary welfare organisations

React • Redux • Ionic • Ruby on Rails • PostgreSQL

- Maintained relational databases on PostgreSQL and REST APIs with Ruby on Rails for Lion Befrienders
- Built Progressive Web Applications with React + Ionic that's in production - helping seniors book activities online
- Led the effort to update Ruby on Rails versions, upgrading from Ruby 2.5.3 and Rails 5.2.1 to Ruby 3.0.3 and Rails 6.1.5

FULLSTACK ENGINEERING INTERN

Diabetes Singapore (SG)

Aug 21- Aug 22

DS is an organisation that helps provide diagnosis, treatment and community to diabetes patients.

React • Redux • TailwindCSS • ExpressJS • PostgreSQL • Sequelize

- Developed a web application with React that automated Diabetes Singapore's planning process and replaced their previous Excel-based workflow
- Developed relational databases with PostgreSQL and REST APIs with TypeScript and Express
- Awarded a Plaque from the Minister of Education in recognition of the utility of our work

PROJECTS / AWARDS

SCOOT REIMAGINED

Singapore Airlines Hackathon, **1ST PLACE**

The SIA Hackathon is an annual global hackathon to find innovative solutions to real-life industry challenges.

 [View GitHub](#)  [Visit Project](#)

React • Redux • TailwindCSS • Ionic • Python • TensorFlow

- Placed first out of over **110 global submissions** in an annual global hackathon to source solutions to aviation industry problems
- Developed a Progressive Web Application with React + Ionic that leveraged TensorFlow recommenders A.I. to recommend ancillary services based on user profiles and preferences

PROJECTS / AWARDS

RECYCLOPS

LifeHack, 1ST PLACE

LifeHack 2022 is the largest student run hackathon in Singapore.

[View GitHub](#) [Visit Project](#)

React • Redux • TailwindCSS • TypeScript • Ionic
• Python • Pytorch

- Awarded Theme Best out of over **413 participants**.
- Recyclops, a PWA powered by machine learning, allows users to scan household objects for recycling information, including safety, recycling instructions, and special requirements
- Recyclops also serves as a recycling information dashboard, providing users with access to articles

DULWICH BOOKINGS

Resource Management System

Dulwich Bookings is a Booking System built for DCI's family of schools to help manage and book highly contested resources and rooms.

[View GitHub](#) [Visit Project](#)

React • Redux • TailwindCSS • MaterialUI •
TypeScript • Sequelize • ExpressJs • PostgreSQL

- Served as **Software Lead** for a team of 6 and planned the weekly sprints with agile development.
- Leveraged CI/CD pipelines to automate push and pull request checks.
- Planned the overall database architecture and performed code reviews to ensure and enforce high-quality code.
- Website is used daily by over **300** students, increasing the productivity of teachers.

PROJECT SIGHTWORDS

Education Tech Software

Developers from Google Developer Student Club NUS created a custom online learning platform to make learning more fun and effective for dyslexic students.

[Not_Available](#) [Figma Prototype](#)

Links are unavailable to safeguard the sensitive data of students.

React • Redux • TailwindCSS • MaterialUI •
TypeScript • TypeORM • NestJs • PostgreSQL

- Application was developed with collaboration from the Dyslexia Association of Singapore
- Built an online learning platform with React and Typescript that helped dyslexic children overcome their learning difficulties.
- Implemented an interactive, responsive canvas that allowed students to draw and practice words.
- Streamlined staff workflow with an in-house student course management system.

SKILLS

EXPERIENCED

React • Redux • TailwindCSS • MaterialUI • BlueprintJS • Express • PostgreSQL • jQuery • Git • Rails • Sequelize •
NodeJS • Ionic • Capacitor • Recoil • Storybook • JavaScript • TypeScript • Java • Ruby

FAMILAR

Ecto • AWS Lambda • AWS DynamoDB • AWS API Gateway • Python • Elixir • Erlang • SQL • Swift • R • C • C++ • Autolt

LEARNING

ElectronJS

TEACHING

NATIONAL UNIVERSITY OF SINGAPORE

CS2030S Programming Methodology II (System Design and Object Oriented Programming)

- Lead weekly Tutorial Classes teaching 15 students the principles of OOP and System Design in Java.

ST1131 Introduction to Computational Statistics (R Programming)

- Taught over 10 Students Computational Statistics.
- Lead weekly tutorial classes.