

Justin Cheah Yun Fei

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Education

Aug 2022 – May 2026	National University of Singapore <ul style="list-style-type: none">Bachelor of Computing (Honours) in Computer Science (4.42/5.00)Bachelor of Business Administration (second degree) (4.67/5.00)	Singapore
Jan 2016 - Dec 2021	Hwa Chong Institution <ul style="list-style-type: none">Singapore-Cambridge GCE Advanced Level (90/90 RP)H2 Mathematics, H2 Physics, H2 Knowledge Inquiry (Philosophy), H2 Economics	Singapore

Work Experiences

NUS Enterprise MVP Studio <i>Software Engineer Intern</i>	Aug 2023 - Present Singapore
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- Currently building a web application for Comcrop, Singapore's first and only rooftop farming start-up using Reactjs, TypeScript, Django, MongoDB while ensuring robustness through Jest-based testing
- Partnered with a Master Engineer and fellow interns to build Minimum Viable Products (mobile and web applications) for 3 NUS backed start-ups
- Designed and architect systems (APIs, database, processes) from scratch based on technical requirements and user stories
- Set up pipelines for continuous integration to help streamline testing processes

LFG <i>Software Developer Intern</i>	Aug 2023 - Dec 2023 Singapore
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- Worked closely with founders to implement full-stack features for LFG's web application in an AGILE environment with Typescript, Reactjs, Nextjs, Tailwind, Prisma
- Contributed to the implementation of major features such as the banners, following/follower system, auto add images when attractions are added, adding attractions to other placelists, hottest locations section, adding socials
- Refactored a large bulk of the codebase to render as server components instead of client components to improve interactivity

Codomo Pte Ltd <i>AI and Software Engineer Intern</i>	May 2023 - Aug 2023 Singapore
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- Worked extensively on Rolljak, an eduTech software similar to Kahoot, with greater emphasis on collaboration and variety
- Led the integration of OpenAI's LLM with Langchain and spearheaded the implementation of Rolljak's [AI Question Generator feature](#) from scratch for diverse activity and upload types
- Implemented other full-stack features and UI/UX improvements with JavaScript, jQuery, Bootstrap, Ruby on Rails
- Enhanced security and efficiency by sanitizing user inputs, mitigating prompt injection, and optimizing processing times with concurrent programming
- Automated workflow such as benchmarking of question generation results by different prompts, and comparison with competitors' results using Python and Selenium
- Reviewed pull requests, led certain deployment meetings

Projects

SoulScribe – AI Journaling Info	<ul style="list-style-type: none">Created SoulScribe with a partner, a gamified AI-powered journaling iOS and Android mobile application which won the Judges Choice Award (top 0.58%, 3 out of 518 groups) for NUS Independent Software Engineering ProjectImplemented the frontend with React Native Expo, JavaScript, tailwind CSS; backend with Firebase for authentication, cloud functions and database, Pinecone for vector databaseDeployed mobile application to App Store and Google Play Store
Stock Trading Bot Info GitHub	<ul style="list-style-type: none">Created a stock trading programme in Python for the Huawei Innovation Challenge 2022 using machine learning to process 80GB of past stock data to make predictions to trade stocks with decision tree regressorCreated shell scripts to automate the process of validating the model and comparing the profit of different strategies with the base model

emoSense (team) Info	<ul style="list-style-type: none"> emoSense is an application to help people suffering from Alexithymia (inability to identify and describe emotions) to better understand their emotions (Hackathon winner) It identifies speech in real time, analyse and classify them based on the severity of the Alexithymia chosen, and provides an audio feedback to the user
AI Cover Letter Bot GitHub	<ul style="list-style-type: none"> Created a Telegram bot in Python that allows users to generate personalized cover letters for job applications by just typing in the company name It web scraps details about the company, and generates the cover letter using LLM
CLI tools GitHub	<ul style="list-style-type: none"> Created a few commands in Rust for the command line interface to enhance productivity in the terminal, including command to check for file duplicates, command to ask a LLM directly in the terminal, and command to access snippets of other commands
Cosmos Auto Clapper GitHub	<ul style="list-style-type: none"> Created a program with a graphical interface that allows users to automate various cosmetic processes in the corporate remote workplace app Cosmos such as auto clapping, auto sending of emojis, and auto snowball spamming
Benchmark Generator GitHub	<ul style="list-style-type: none"> This is a script to benchmark the quality of questions created by Rolljak vs QuizWizard It uses bash scripting and Selenium to automate user inputs on the QuizWizard to generate questions, which is then benchmarked with questions generated by Rolljak
Student DeliveRHy Bot Info GitHub	<ul style="list-style-type: none"> Created a simple telegram bot with a partner that allows students to create orders for selected NUS food stalls, and also for students to take up delivery orders
Clone Websites and Games GitHub	<ul style="list-style-type: none"> Integrated custom features such as an AI chatbot into Codomo's website which answers questions about the company Created custom text-based games based on existing templates on Rolljak
Relevant School Works	<ul style="list-style-type: none"> Greenfield task management software in java - BouncyBob Brownfield project management software in java (done with 4 other members) – TaskWise Data processing and machine learning using random forest regressor and neural network Data processing and machine learning using neural network (CNN) and hyperparameter tuning Participated in the Sumo Bot Competition

Scholastic Achievements/Extracurricular Activities

Aug 2022 - Present	ASEAN Undergraduate Merit Scholarship Ministry of Education scholarship (academic excellence)	Singapore
Aug 2023	Orbital Judges' Choice Award <ul style="list-style-type: none"> Awarded to 3 teams (out of 518 teams) for the National University of Singapore (NUS)'s Independent Software Engineering Project 	Singapore
Aug 2022 - Mar 2023	Developer for Student Housing Raffles Hall <ul style="list-style-type: none"> Student Frontend Developer maintaining the hall web page 	Singapore