Chee Heng Koh

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Personal Profile

As a student majoring in Computer Engineering at National University of Singapore, I am a motivated and enthusiastic individual with a passion for software engineering and innovation. Over the course of my studies, I have been equipped with a solid foundation in both hardware and software principles, allowing me to approach challenges with a holistic perspective. My personal projects have also equipped me with a relevant technology skill set and more important, the ability to pick up new skills quickly.

Current Grade Point Average (GPA): 4.73 Honours (Highest Distinction)

Education

National University of Singapore
Singapore

Bachelor of Engineering (Computer Engineering)
July 2021 - Current

- **Courses:** Programming Methodology, Data Structures and Algorithms, Introduction to Machine Learning, Software Engineering and Object-Oriented Programming, Blockchain Engineering, Calculus, Discrete Structures, Linear Algebra
- Deans' List in Academic Year 2022/23 S1

Boston University
Boston MA , United States

Student Exchange Program
Sep 2023 - Current

- **Courses:** Database Management, Computer Networking, Operating Systems

Work Experience

AlphaTrue Joint Stock Company
Ho Chi Minh City, Vietnam

Software Engineer Intern (Backend)
May 2023 - Aug 2023

- Design and implement Web-Application compatible AI utility features.
- Develop AI agents and supporting vector embedding database.
- Design and implement APIs to support features developed.

National University of Singapore
Singapore

Teaching Assistant and Software Engineering Student Advisor
Jan 2023 - Aug 2023

- Conducting tutorials for Software Engineering and Object-Oriented Programming course.
- Assisting in course administration and coursework grading.
- Advise student teams on technical and project management aspects of software engineering.
- Perform technical administrative duties and database management.

Projects

Inventory Management System
Singapore

Project for St John Brigade Singapore
May 2023 - Current

- Developed frontend and backend of Web-App to facilitate first-aid supplies and inventory management
- Project done on voluntary basis based on client requirements.
- **Technical Skills:** ReactJS, Django, SQL, and automated testing.
- **Soft Skills:** Project Management, Software Engineering Practices, Problem Solving

Exercise monitoring with Computer Vision
Singapore

Form for the Average Joe
May 2022 - Jul 2022

- Created a Web-App, in collaboration with one other teammate, which uses a camera to check user's posture during exercise.
- Project done as part of NUS CP2106 Orbital self-directed project.
- **Technical Skills:** ReactJS, Firebase, Redis and AWS EC2
- **Soft Skills:** Project Management, Software Engineering Practices, Problem Solving

Document to Video AI Conversion
Singapore

Personal Project
May 2023 - Jul 2023

- Created a Web-App to convert PDF documents into summary videos with audio narration.
- Used LLMs and generative AI to achieve desired conversion quality.
- **Technical Skills:** Flask, Docker, Celery, Google Cloud Platform, LangChain, Redis
- **Soft Skills:** Software Project Collaboration, Product Presentation

Fundraising on Ethereum Blockchain   *Singapore*

National University of Singapore   *Sep 2022 - Nov 2022*

- Created a Web-App for charity fundraising on the Ethereum Blockchain, transacting in Ether.
- Project done as part of NUS EE4032 Blockchain Engineering Project.
- **Technical Skills:** ReactJS, Smart Contracts, Solidity
- **Soft Skills:** Project Management, Problem Solving, Project Presentation and Communication

Skills

Programming	Python, C++, Java, Javascript, C, Matlab, Solidity, Bare-Metal Programming, Verilog
Tech Stacks	ReactJS, Firebase, Ruby on Rails, Redux, Flask, Django, Docker, Celery, DBMS (MySQL, PostgreSQL)
Others	Git, Microsoft Office (Excel, Word, PowerPoint), Final Cut Pro X (Video Editing), R Studio, Canva, Autodesk Fusion 360

Extra Curricular / Other Activities

St John Brigade Singapore   *Singapore*

Voluntary Fullstack Developer   *Apr 2023 - Current*

- Work on inventory management system as a fullstack developer.
- Design backend infrastructure: APIs and databases.
- Contribute to frontend development and UI design.

NUS Cuesports   *Singapore*

Vice-President   *May 2022 - May 2023*

- Led executive executive committee for projects and events.
- Managed administration of clubs activities under the Presidential cell.
- Collaborated with external parties for events and projects.

SRA Retail Reimagined Innovation Challenge   *Singapore*

Competitor   *May 2022 - July 2022*

- Proposed Augmented Reality and Blockchain solution to scale retail businesses towards Web3.0 technologies.
- Challenge Finalist
- Clinched Final award for Best Teamwork

U21 Global Citizenship Course   *Global (Online)*

Participant   *Oct 2022*

- Graduated from course after project work and discussions with other undergraduates from around the world.

Languages

English	Professional proficiency
Mandarin Chinese	Bilingual Proficiency (Reading and Writing)